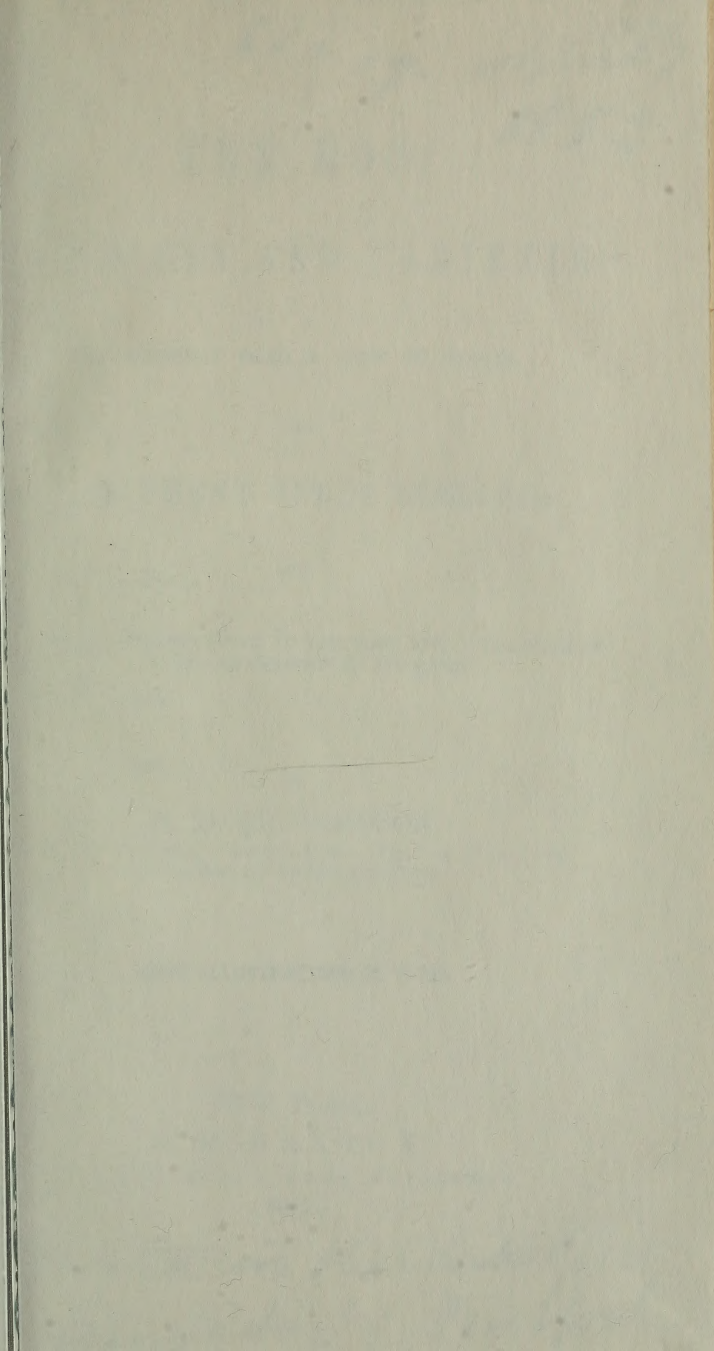


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THE HOG;

HIS ORIGIN AND VARIETIES,

MANAGEMENT WITH A VIEW TO PROFIT,

AND

--- EATMENT UNDER DISEASE;

ALSO,

Vol. RELATIVE TO THE MOST APPROVED MODES OF
CUBING AND PRESERVING HIS FLESH.

Date

Spe

BY

H. D. RICHARDSON,

Author of "The Horse," "Domestic Fowl," "The Pests of the Farm,"
"The Hive and the Honey-Bee," etc.

WITH ILLUSTRATIONS ON WOOD.

NEW YORK:

C. M. SAXTON,

AGRICULTURAL BOOK PUBLISHER.

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C. M. SAXTON,

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CONTENTS.

CHAPTER I.

Page

UTILITY OF THE HOG	7
--------------------------	---

CHAPTER II.

THE WILD ORIGINAL	9
-------------------------	---

CHAPTER III.

VARIETIES OF DOMESTIC HOG	16
---------------------------------	----

	Page		
Chinese and Siamese.....	17	Gloucestershire.....	24
Berkshire	20	Northamptonshire	ib.
Irish.....	21	Norfolk	ib.
Hog of Ancient Ireland.....	ib.	Leicestershire	ib.
Suffolk	22	Lincolnshire.....	25
Cheshire	ib.	Essex	ib.
Hampshire.....	23	Improved Essex	ib.
Yorkshire.....	ib.	Essex Half Blacks.....	ib.
Shropshire.....	ib.	Sussex	ib.
Wiltshire	ib.	Old English	26
Herefordshire.....	24		

CHAPTER IV.

CONTINENTAL VARIETIES.

Westphalian	26	Pay d'Auge	28
Neapolitan	27	Perigorde	ib.
French Swine	ib.	Champagne	ib.
Poitou.....	28	Boulogne	ib.

CHAPTER V.

POINTS OF A GOOD HOG.....	28
---------------------------	----

CHAPTER VI.

HOUSES AND PIGGERIES.....	30
---------------------------	----

CHAPTER VII.

BREEDING, REARING AND FEEDING	33
-------------------------------------	----

CHAPTER VIII.

TIME REQUISITE FOR FEEDING FAT, QUANTITY OF FOOD, AND PROPORTIONATE INCREASE OF WEIGHT IN A GIVEN TIME	43
--	----

CHAPTER IX.		Page
DISEASES OF SWINE		44
	Page	
General Remarks	44	Crackings
Fever	45	Swelling of the Spleen, or "Ratille," ..
Leprosy	47	Surfeit
Murrain	ib.	Lethargy
Measles	48	Heavings
Jaundice	ib.	Diarrhœa, or Looseness
Foul Skin	ib.	Quinsy
Mange	ib.	Tumors
Staggers	51	Catarrh, or Cold

CHAPTER X.

SLAUGHTERING AND CURING	94
Unnecessary Cruelty in Killing de- precated, and a Humane Method pointed out; also various Modes of Killing, as now and formerly prac- tised	55
Dressing and cutting up	57
Different Modes of Curing	58
Mild Cure	59
Smoking	ib.
Best Sawdust for	60
Westphalia Hams	60
Limerick	ib.
Hampshire	ib.
Wiltshire	61
Skinning	ib.
Patent Curing Machine	ib.
On Extracting or Discharging Salt from Cured Meat	62
Practical Directions for Curing on a small or large scale	ib

H O G S ;

THEIR ORIGIN AND VARIETIES.

CHAPTER I.

UTILITY OF THE HOG.

THE HOG is an animal whose properties are calculated, in a very remarkable degree, at once to awaken the aversions and command the consideration of mankind : the former excited by the habits and manners displayed by the animal during life ; the latter the result of reflection upon the sources of profit derivable from his carcass after death. The hog is at once the foulest and the most useful of quadrupeds. In aspect and general form he is uninviting ; his life is seemingly devoted to the attainment of sensual or disgusting objects which constitute his enjoyments : and yet, however filthy in his habits, unsocial, often ferocious, he may be, he is one of the most valuable of animals ; and is esteemed from the palace to the meanest cabin.

It is probable, that the repulsive habits of the hog, in a domesticated state, are attributable to his domesticators—the human race. The wild boar, the original of the domestic hog, does not present the same disgusting habits or gross sensuality as does his reclaimed descendant. It may be stated, that the domestic hog is bloodthirsty and treacherous. The proofs of such a disposition rest upon a few occurrences ; we can easily bring forward instances of an opposite character. We have many proofs of the sagacity that the hog is possessed of, and to elicit which, education and judicious management are required ! Have we not had “learned pigs,” capable of selecting cards from the pack, and of joining letters together to form words ; and of performing many other

tricks that, were the sagacity of the hog of inferior grade, it never could have been taught to perform? There are two instances of this animal having been trained to the sports of the field: one occurred in the establishment of that celebrated sportsman, Colonel Thornton; and a sow was broken in to set game by Mr. Toomer, gamekeeper of Sir H. P. S. Mildmay. The latter animal turned out a most staunch pointer, and would quarter her ground, point, and even *back the dogs*, as correctly and as brilliantly as any first-rate setter of the canine race. Having been detected in the act of devouring a lamb, she was sold, and met the usual fate of her brethren—the knife of the butcher.

Nor are instances rare of the hog having conceived affection for other animals of a different race. A domestic pig attached itself to a bulldog, whom he would follow everywhere, and with whom he would gambol and play in the most harmonious manner; if the dog went with his master on a ramble, the pig would form, if permitted, one of the party; and when a stick was thrown into the water, for the dog to fetch, the pig would rival his canine associate, boldly take to the water, and delight in swimming; if it succeeded in reaching the stick sooner than the dog, it would take it in its mouth, and fetch it safely to land.

Such pigs as I have been for any length of time in the habit of visiting, have not only recognized me, but testified joy on my approach, and satisfaction at my caresses; nor could this have originated in motives of a selfish or sensual nature, as I was not their feeder.

It may be said that the pig *naturally* loves foul food and filthy bedding. That the wild boar does not is evident from his cleanly habits, and the dry and clean lair which he forms in his native forest; and that the domestic hog does not will be admitted by any person who has witnessed the delight that animal manifests on being furnished with fresh straw after his sty has been cleansed. "A hog is the cleanest of all creatures, and will never dung or stale in his sty, if he can get forth." "The hog, though he tumble in the dirt in the summer, is not a filthy animal. He doeth it, partlie to cool himselfe, partlie to kill his lice; for when the dirt is drie he rubbeth it off, and thereby destroyeth the lice." And do not other members of the order, including the *half-reasoning* elephant, practise the same; a resource no more than parallel with the custom of some savage nations, anointing their skins with grease for the same purpose. It is the fact that the hog will thrive

better, and fatten more quickly, if kept with proper attention to cleanliness. We have not improved the character, or ameliorated the condition of this animal by domesticating him,—many of those habits that excite our disgust, are attributable to our misconception of his natural propensities, and mismanagement of him in a state of captivity. The hog, as we generally find him, is, in life, a very disgusting brute; and still, all these disagreeable qualities are amply counterbalanced by his extraordinary utility after death.

The flesh of the hog is remarkable for the property of taking salt more *kindly* than any other description of meat; it consequently retains its sweetness for a much longer period, and is, on that account, particularly calculated for ships' stores. It can be used for a greater length of time without change, without producing weariness of its use, or any of those unpleasant effects commonly attendant on the continued use of salt provisions, *as scurvy, &c.*, than any other description of salted meat; besides, it is denser in texture, and therefore *goes farther*.

The lard of the hog is in high esteem with the apothecary, for forming plasters, ointments, and other similar preparations—with the hairdresser, for forming pomatum, *bear's grease, cold cream*, and other accessories of the toilet. Its bristles are in demand with brushmakers and shoemakers; of the skin is made pocket-books, saddles, boot-tops; and even the ears are frequently made into pies. The hog furnishes another article, when properly fed and managed with a view to its production, namely, *brawn*. Among the properties of the hog, we must not omit sausages and black puddings, the former so greatly relished as adjuncts to dishes of a less savory character; nor, in conclusion, is the manure produced from the sty to be overlooked, nor its fertilizing properties forgotten.

I thus offer an apology for the hog's disagreeable peculiarities; he really is the most useful of quadrupeds.

CHAPTER II.

THE WILD ORIGINAL.

THE Hog belongs to the Class Mammalia, or animals possessing teats or *mammæ*, for the nourishment of their young—to the sixth order, Pachydermata, or thick-skinned animals—to the ge-

nus, third of the order, *Sus*, or swine—and to the species, *Sus Scropha*, or Hog.

The dentition of the hog is as follows :—

Incisors $\frac{4}{6}$ or $\frac{8}{6}$	Canines $\frac{1}{1} \cdot \frac{1}{1}$	Molars $\frac{7}{7} \cdot \frac{7}{7}$
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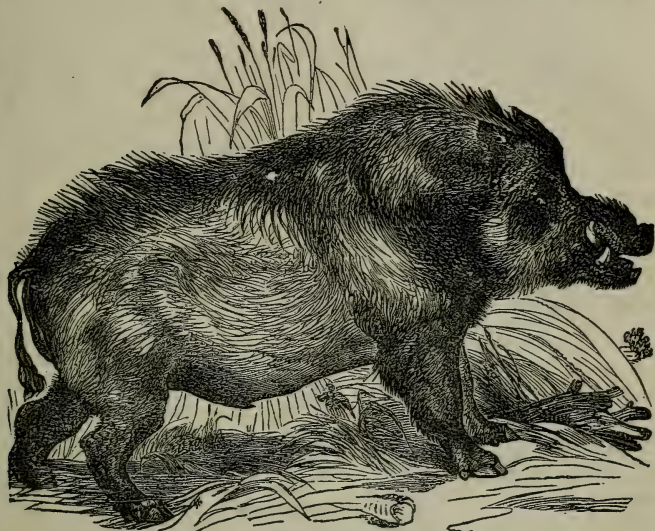
The incisors of the lower jaw are directed obliquely forwards ; those of the upper are of a conical form. The canine teeth, or tusks, continue to grow, and increase in size during the whole of the animal's lifetime, projecting from the mouth, often to a very considerable length, and frequently curving outwards and backwards towards the extremities. The molars, or cheek teeth, are simple and tuberculated. There are four toes on all the feet, of which the two middle ones only rest upon the ground ; but there exists a peculiar breed of swine, in other particulars true hogs, but possessing a *solid hoof*, formed of a *single toe*. These hogs are found in Sweden, especially about Upsall.

The nose of the hog is elongated, cartilaginous, and the snout is furnished with a particular bone. This arrangement is apparently with a view to facilitate the rooting and turning up the earth, in which the animal, in a state of nature, finds the chief portion of its subsistence. The teats are twelve in number ; the body is cylindrical in form, and is covered with a thick skin, furnished, more or less, with bristles and stiff hairs ; besides which, in some varieties, is an under coat of close curled hair. The ear is either small and upright, or large and pendulous. This member forms the chief characteristic of the domestic hog, and a large and pendent ear will be found the general concomitant of large size.

THE WILD BOAR is the origin of our domestic varieties of hog. They resemble him closely in form, and when permitted the enjoyment of their natural propensities, in habits also. The period of gestation in the wild and domestic Sow is the same, viz., sixteen weeks, and the two animals freely breed together, and produce fertile young ; and these young will breed between themselves. Some writers have asserted the hog of the South Sea Islands, of China, and the Indian dominions to be distinct species, but without foundation.

The Hog is to be found in Europe, Asia, and the North of Africa. It has been introduced into, and thrives in America, Australia, and the South Sea Islands. In America he presents a slight variation of form in the *Dicoteles*, and in Africa in the *Phacochæres*. That of the South Sea Islands has been asserted to be a

distinct species of true pig ; but erroneously. It is not impossible that we might reclaim the Babyroussa and the Dicoteles ; and the acquisition would be sufficiently valuable to warrant the attempt.



WILD BOAR.

The Wild Boar is very common in all the reedy marshes of Tartary and Siberia, and in the mountainous forests in the vicinity of Lake Baikal, as far as Lat. 50° , but is said not to occur in the northern extremity of Siberia.

The hog was not indigenous to the American Continent, but introduced into it by the Spaniards ; either the original stock was a good one, or the breed has thriven peculiarly in that country, the present South American breed being remarkable for arriving early at maturity, and fattening easily. A sow, and a litter with her, were brought from Monte Video. One of these fattened, when very young, to 336 pounds ; and although *ripe*, it had, in the opinion of the butcher, more flesh in proportion than he had ever before witnessed.

The food of the wild hog consists chiefly of roots and vegetables. Worms, insects, as well as acorns, beechmast, chestnuts, are

also greedily sought after and devoured; and acting upon a knowledge of the animal's feral habits, some proprietors turn out their swine to feed in the forests, searching for and driving them home when in a fitting condition. The pork of hogs, thus suffered, for a time, towards the close of their life, to cater for themselves, is found to be peculiarly sweet and delicate. A similar system is still resorted to in many parts of America, and with equal success; for we are not to judge of the true flavor of American pork from such as is at present imported into this country, its coarse taste and extreme hardness of texture being the result of the curing process adopted, and not of any improper method of feeding.

The Hog is, unless hard pressed, by no means so foul a feeder as many suppose. This will be better understood from the following table, representing the comparative graminivorous propensities of the ox, horse, sheep, goat, and hog.

The ox eats	276 plants	and rejects	218
The horse	262	"	" 212
The sheep	387	"	" 141
The goat	449	"	" 129
The hog	72	"	" 171

The boar is, in his wild state, an object of terror, but when reduced to captivity, becomes comparatively gentle and manageable. A wild boar kept some years ago in the Parisian menagerie, performed several tricks, went through different exercises, and assumed various attitudes;—the stomach was however the "master of arts" on this occasion, for bread was the reward of obedience. In confinement, the wild boar soon becomes as inured to filth as the nastiest amongst his domesticated brethren.

The color of the wild boar is a brownish black, inclining to grey; he is usually not so large as our domestic breeds of hog, not exceeding from twenty-five to thirty inches in height at the shoulder; instances, however, of its attaining a larger size are recorded. He lives about thirty years; having attained maturity at about the fourth season. In habits, he is solitary, and lives apart from his kind in the forests. During the rutting season, in the months of December and January, he goes forth from retirement, and rejoining the herd, selects a mate. This selection is of course not made without many an obstinate conflict with fierce and formidable rivals, but the conqueror and his bride betake themselves to some unfrequented spot, and pair for thirty days.

The sow brings forth from four to ten little ones at a litter. The domestic hog is more prolific than his wild original, and even fourteen and fifteen young have been produced by the domestic sow at one litter. At birth, the sow carefully conceals her farrow from the boar, who would otherwise devour them. The color of the young of the wild sow is a pale yellowish brown, marked with longitudinal black bands. The females live together in herds; several litters, with their dams, joining company, and the young boars remain with the herd until maturity. The habits of the wild boar are nocturnal, for he lies close during the day, and in the evening he goes forth to feed. In harvest time he does much mischief to the grain crops, and to the vineyards, trampling beneath his feet more than he consumes as food. The boar has been asserted to be in part carnivorous, and it has been stated that he eats horseflesh, and that the skins of deer, as well as claws and bones of birds, have been found in his stomach. It has even been stated that he will seek for and devour the smaller kinds of game, as partridges, leverets, and also eggs. Some, in alluding to the propensity for devouring their young, frequently displayed by the domestic sow, as also her occasionally destroying and devouring young children in the cradle, have endeavored to account for it, by attributing to them a violent craving for blood; this may be so.

Professor Lowe very naturally suggests that a sow's devouring her young is, in the strictest sense of the word, an *unnatural* act, one that would not take place in a state of nature, and most probably the consequence of the artificial position in which the animal is placed,—surrounded by filth and damp, and exposed to the annoyance of being constantly disturbed by visitors; for at this period, the sow is particularly irritable.

As to their destroying children, other animals have done so quite as frequently as the swine; and yet, these solitary instances have never been recorded as a stigma upon their entire race. The fact is, that the poor pig has far more than its just share of sin to answer for.

Hunting the wild boar is an exciting and dangerous amusement, perhaps one of the most so amongst field sports. It is usually followed by mounted huntsmen, armed with spears or rifles, aided by hounds, and attended by assistants, called on the continent "*piqueurs*" or *prickers*, whose duty it is to find and rouse their game from his lurking place. The boar is an animal of no

contemptible swiftness, and it is not every horse that is able to keep up with him, when once fairly afoot. Unless molested, or his lair threatened with invasion, the boar will not attack man; but once aroused, his ferocity is formidable, and his defence of the most resolute description; he displays so much courage and determination, that it is impossible not to regard his character as partaking of the noble, and almost to regret the destruction of so brave a foe. When overtaken and brought to bay, is the time when the affray becomes invested with a serious character. Woe then to the horse who suffers himself to be seduced or goaded into too close proximity with the infuriated animal: woe to the dog who attempts to seize the monster by the ear or flank, prior to its strength having been sufficiently reduced by the spears or bullets of his human foes: and woe to the huntsman, who, thrown from his steed, or whose own foolhardiness has induced him to venture too near, fails in heart or hand, so as to cause the fatal ball to swerve from its true course, or direct the boarspear with nervelessness or irresolution. In such case, death and destruction are dealt around;—dogs, horses, and men are successively overthrown with ferocity and irresistible force. The boar inflicts a terrific wound with his tusks; and a horse once wounded by him, can never again be induced to approach him. Most dogs that have been thus served, and have recovered, have proved useless cowards.

The wild boar of Europe is now, however, by no means the formidable quarry he once was; and, in the foregoing description, it was his Indian Congener that I had more particularly in view.

An old French newspaper details an account of an extraordinary boar killed near Cognac, in Augoumois. This was a beast of most formidable dimensions and notoriety. He had been frequently hunted, but unavailingly; his prodigious strength and powers of endurance bringing him off on all occasions, safe, if not scatheless; he had killed many horses and dogs, and maimed and killed several men; when at last slain, several bullets, received during previous conflicts, were found between the skin and the flesh. His size was prodigious, but his exact measurement not known. He had a very lengthened head, an elongated and sharp snout, and a terrific mouth, with formidable tusks of unusual magnitude and shape. The hair on the body was white, on the head yellowish, and on the neck was a black band; the ears were very large and straight. Notwithstanding the prodigious bulk of this creature, he displayed great swiftness.

In India, boar-hunting is still deemed a favorite diversion, and is eagerly pursued. The chase is usually followed on Arabian horses, which are preferable on account of their superior speed and tractability; the boar goes off at first in a slow trot, which soon, on being pressed, merges into a shambling gallop; the pace of the animal is then so swift that he can only be taken by running down. In a run of three miles the boar has often escaped altogether, and instances frequently occur of the chase extending over seven miles of country. The ordinary height of the Indian boar is three feet, but sometimes three feet six inches in height. The young of the Indian animal are of a pale yellow color, irregularly brindled with yellowish brown.

In former times, the wild boar roamed the glades of our own forests, and, as one of the noblest beasts of chase, had the honor of enjoying, with his compeers, the express protection of royalty. Of its existence, various records remain, and these consisting chiefly of edicts or proclamations that had been issued, announcing sundry pains and penalties as the consequence of its illegal destruction.

Fitzstephen, who wrote in the latter part of the twelfth century, states, that boars, wolves, wild bulls, and other game, abounded in the great forests surrounding London; and Scottish writers have not failed to mention those of Scotland.

Of the precise date of the extinction of the wild boar in the British Islands, we have no available record; but it is known, that so recently as the date of Charles I. that monarch endeavored to introduce these animals to the New Forest, Hampshire; these were, however, all destroyed in the civil wars.

We conclude this chapter with a few observations as to the estimation in which the hog has been held in different ages and in various lands. Moses, the inspired lawgiver of the Jews, prohibited the use of swine's flesh to his followers: "Because it divideth the hoof, yet cheweth not the cud." The Egyptians could eat pork only once a year, viz., on the Feast-day of the Moon, on which occasion they sacrificed to that luminary as a goddess. At all other times the hog was held to be unclean; and if any one only touched one of these animals, he could not enter a temple, nor hold intercourse with his fellow-men, until he had dipped, clothes and all, in the waters of the far-famed Nile. Those employed as swineherds belonged to a class or *caste*, degraded, despised, and, like their charge, held in utter abomination. This

aversion to the hog became transmitted to Northern Egypt, and the Copts altogether avoided rearing or keeping any of the race. The causes for these prohibitory enactments have been variously explained, but perhaps the most probable is, that in Egypt, Syria, and even the southern parts of Greece, the flesh of the hog, though in appearance white and delicate, is destitute of firmness, and is so overloaded with fat as to be calculated to disagree with the strongest stomach. An indulgence in such pork, therefore, under a burning sun, would possibly be attended with fatal consequences. Tacitus states, as the cause of swine's flesh being rejected by the Jews, the liability of that animal to be afflicted with leprosy; the use of sow's milk is mentioned by Plutarch as productive of that loathsome disease.

It has been affirmed that the chief cause of the rejection of Mahometanism by the Chinese was, their partiality for the flesh of the hog, denounced by that religion as an abomination.

During the days of the Roman empire, when epicurism had probably attained a greater height than it has ever since been permitted to reach, one of the most favorite dishes of the time, as well as the most fashionable, was a pig roasted entire, stuffed with various delicate birds and spices, steeped in choice gravies and costly wines.

Another great Roman dish was an entire hog, one half roast and the other boiled, and so carefully and curiously prepared, that the most accurate eye could not discover the process by which the animal had been put to death, or the stuffing introduced.

CHAPTER III.

VARIETIES OF THE DOMESTIC HOG.

DOMESTICATION has invariably the effect of producing *varieties* of any given species of animals. These variations from the original, spring from variety in the feeding and management—individual taste or caprice in breeding, with a view to a particular form or size—or the crossing with other and allied stock. It is possible that all these have operated in the case of the hog; and it is certain that we have now, in the breeding of that animal, arrived as nearly at perfection as we could reasonably hope. It

were well that breeders always knew where to stop, for even improvement has a limit; and crossing, when carried beyond a certain point, will almost inevitably result in deterioration.

It has been asserted, that there exist only **THREE** actual varieties of the domestic hog—the Berkshire, Chinese, and Highland, or Irish; and that all other breeds, described as separate varieties, are nothing more than offshoots from one or other of these three main stocks. That such, to a certain extent, is the case, we admit. The fact is, however, that we are indebted for our numerous varieties of hog, as at present known, not only to these three well-known varieties, but also to the African hog—the Spanish, and Portuguese, and the Italian—chiefly, however, to the wild boar of the European forests.

THE CHINESE HOG.

The Chinese Hog is to be met with in the south-eastern coun-



tries of Asia, as Siam, Cochin China, the Burman empire, Cambodia, Malacca, Sumatra, and in Batavia, and other eastern islands. There are *varieties* of the hog in India and China, and hence the

occasional confusion of nomenclature met with in books of natural history.

There are two well-marked varieties of the Chinese hog—that from Siam, and that from China proper. The chief, if not only, point of difference subsisting between them is, however, in color—the Siamese variety being usually black and the Chinese white. Neither of these hogs, however, present constant uniformity in this respect, their color frequently varying, and black hogs coming from China, while white ones are brought from Siam. Even in the same litter, have pigs of different colors frequently been seen, and instances of the occurrence of *piebald* individuals. In the case of all animals submitted to the influence of domestication, color alone is by no means a safe criterion in the enumeration of varieties.

The Chinese hog is of small size. His body is very nearly a perfect cylinder in form; the back slopes from the shoulder, and is hollow, while the belly is pendulous, and in a fat specimen almost touches the ground. The ear is small and short, inclines to be semi-erect, and usually lies rather backward. The bone is small, the legs fine and short. The Bristles are so soft as rather to resemble hair. The skin itself is, in the Siamese variety, of a rich copper color, and the hair black, which gives to the general color of the animal somewhat the effect of bronzing. In the Chinese variety, the color is usually white, sometimes black, and occasionally pied. The white sort are deemed preferable, from the superior delicacy of their flesh. The face and head of the Chinese pig are unlike those of any other description of swine, somewhat resembling a calf.

Both the Siamese and Chinese hogs are very good feeders, arrive early at maturity (a most important particular in any description of live stock), and feed fat, on less food, and become fatter and heavier within a given time, than any of our European varieties. The Chinese value the hog very highly; they live more upon pork than on any other description of animal food; and it is said, that they even use the milk of the sow.

The Chinese take great care of their swine, and pay particular attention to the quality and quantity of their food, feeding them at regular and stated intervals. They do not permit them to walk, but when necessary, have them carried from one place to another. They keep the beds and styes of their hogs scrupulously dry and clean; it is to this attention that we are possibly to attribute the excellent qualities of Chinese pork. The Chinese hogs that

we generally see in this country come principally from the vicinity of Canton, brought thence as sea stock. It is scarcely to be regretted that this breed is not sufficiently hardy to thrive in our climate. From this circumstance, we are compelled to limit the advantages we might otherwise derive from its introduction to crossing with our own coarser domestic breeds of swine. For this purpose it is truly valuable; and the improved race, thus produced, is infinitely superior even to its Chinese progenitor, the latter, in a pure state, being too small, and hence answering rather for pork than bacon, besides fattening even *too easily*. Both these objections are obviated in the cross, which has further the effect of restoring diminished fecundity.

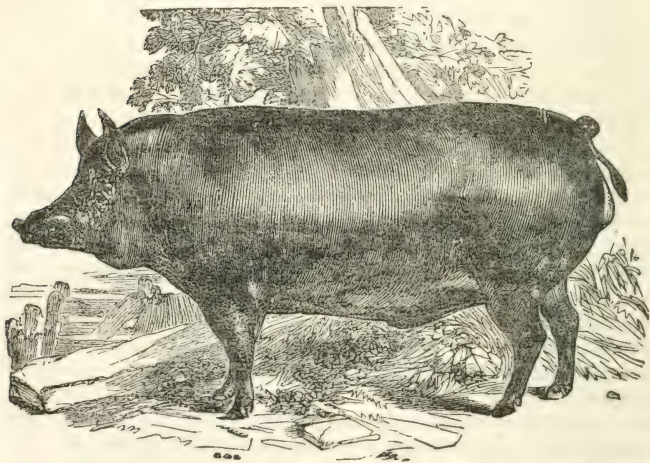
The most profitable cross to be resorted to, was, in the first instance, found to be between the old English, which is not unlike the present Irish breed, and the black Chinese. This cross produced a most capital breed, and a little judicious intermixture afterwards, with proper selection of boar and sow, has eventuated in the desired improvement. By too constant crossing with the Chinese, we may possibly diminish both the size and fecundity of our own hog. This circumstance should induce breeders at all events to use caution and judgment, that they may be aware of the precise moment when they have arrived at the highest attainable perfection; these observations will apply only to a very limited percentage of breeders; the majority, requiring rather to be aroused from the indolence which induces them to abstain from all endeavors towards bettering the condition or character of their stock.

The Chinese breed is not so well known in Ireland as it is in England, or in Scotland, although the climate of the last-named country appears so unsuitable to its constitution. France cultivated this breed earlier than we, and the hog usually described as the PORTUGUESE, is so extremely like the Chinese, that it has been made a question whether these varieties are not identical.

In cases where the reader has reason to suspect that he has crossed too long from the Chinese breed, he will find a dash from the wild boar, or Westphalian, most valuable; this cross will aid in restoring size, but have a still greater effect on the quality of the meat, causing the fat and lean to be more regularly mixed, and imparting to them a delicacy of flavor that will be duly appreciated by the lover of good pork or of sound sweet bacon. The imperfections in shape, and excess of bone and offal which characterize the wild boar, will altogether disappear in the finer form

of the *degenerated* stock with which you cross him. This cross will further supply a suitable THICKNESS of skin—a most essential quality, especially in *pork*—for in thin-skinned pork the *cracklin* or skin becomes so hard and *metallic* that no teeth can master it, whereas in a thick-skinned animal it is merely gelatinous, may be easily masticated, and is a part of the animal too much valued by epicures, and consequently too valuable in the *shambles*, to admit of being neglected by the judicious breeder or producer. This *thinness* of skin, so objectionable in a *pork* pig, becomes the reverse when the animal is designed for *bacon*. The small size, however, of the eastern hog renders him only suitable for *pork*, and hence one reason why too long crossing from him should be avoided. The thinness or thickness of the skin must not of itself alone be deemed a recommendation or the reverse. The *thick* skin must not be *coarse*, for a *coarse thick* skin denotes a bad stock, and pork encased in such a cuticle is *shrunk* in the *cooking*; hence a practice with some cooks to *score* the skin even of *boiled* pork, in order to allow to the flesh room sufficient for swelling.

THE BERKSHIRE.



THIS county has the honor of being the first to avail itself on

the opportunity of improvement afforded by the introduction of foreign stock, nor have its breeders paused where they began, or omitted following up with judgment, perseverance, and success, the advantage they thus, in the first instance, obtained.

The Berkshire hog is of large size, and is almost invariably of a reddish brown color, with black spots or patches. The old breed of Berkshire is now extinct, and has been so for many years; it had maintained a high reputation for centuries. It was long and crooked-snouted, the muzzle turning upwards; the ears large, heavy, and inclined to be pendulous; the body long and thick, but not deep; the legs short, the bone large, and the size very great. This, of course, was not any thing like perfection; the want of depth of body and the weight of bone were highly objectionable, but it was altogether a material improvement upon the gaunt and rugged old English pig, whom it speedily superseded.

The modern and improved Berkshire was in Laurence's time lighter both in head and ear, shorter and more compactly formed, with less bone, and higher on the leg. This breed has been since still further improved by judicious crossing; it still has large ears, inclining forward, but erect, is deep in the body, with short legs, small bone, arrives early at maturity, and fattens easily and with remarkable rapidity. In these improvements we recognize the results of intermixture with the Chinese, but also with another variety yet to be described. The colors and marking of the Berkshire hog show him also to owe a portion of his blood to the wild boar. The true and improved breed of Berkshire is of large size. One of the greatest improvers of modern times was Richard Astley, Esq., of Oldstone Hall.

THE OLD IRISH "GREYHOUND HOG."

THESE are tall, long-legged, bony, heavy-eared, coarse-haired animals, their throats furnished with pendulous wattles, and by no means possessing half so much the appearance of domestic swine as they do of the wild boar, the great original of the race. In Ireland the old gaunt race of hogs has, for many years past, been gradually wearing away, and is now perhaps wholly confined to the western parts of that country, especially Galway. These swine are remarkably active, and will clear a five-barred gate as well as any hunter; on this account they should, if it be desirable to keep them, be kept in well-fenced inclosures. The breed of hogs in

Ireland has improved greatly of late years, and this, the old unprofitable stock, is rapidly disappearing. The form of the Irish hog is now so nearly approximated to that of the English, that the two animals are not readily distinguished from each other.

Notwithstanding the rather unpromising exterior presented by the original old Irish hog, it would be unfair to omit recording his peculiar susceptibility of improvement. It may be well to add that the Irish swine possesses flesh of a peculiarly good flavor.

The most remarkable breeds of hogs, are those of :



SUFFOLK BOAR.

SUFFOLK, said by most writers to be the most nearly related to the CHINESE : my reasons for espousing this opinion will be found in the description of the animal, that of the Chinese being at the same time duly borne in mind. The Suffolk breed of Swine are a small, delicate pig, thin-skinned, soft-haired, small, pricked ear,—color white ; they are in character like the Chinese, fed almost as easily, are more hardy, and possess more lean meat.

THE CHESHIRE BREED is chiefly remarkable for its vast size,

which is almost gigantic. It has a very large and heavy head, long *narrow* body, long legs, large bone, great heavy ears, and loose, ungainly skin: color, large patches of black and white, or blue and white, or white. This breed is susceptible of much improvement by crossing with the Chinese, or the Neapolitan.

THE HAMPSHIRE.—This breed is not unfrequently confounded with the Berkshire, but its body is longer, and its sides flatter; the head is long, and the snout sharp. The color is usually dark spotted, but sometimes black altogether, and sometimes white. In many parts of Hampshire, especially in the neighborhood of the New Forest, it is usual to permit swine to pass a considerable portion of their existence in the woods; the result is superior quality of flesh, exhibiting much resemblance to that of the Westphalian hog, but still more delicately flavored. On this account, the Hampshire bacon is in much demand, and fetches a higher price than that of Westphalia. This is partly attributable to the mode of curing. The original breed of Hampshire was not such as I have described, being generally of a white color, coarse, raw-boned, and flat-sided. The present race owes its origin to the Berkshire, Suffolk, and Chinese breeds, and latterly to a cross from the Leicester; the effect of the last has been increase of size, the original race seldom exceeding four hundred pounds.

THE YORKSHIRE.—The old breed was about the very worst and most unprofitable we had, being gaunt and greyhound shaped, with long, ungainly legs and great excess of bone. Its constitution was likewise bad, it did not well endure the cold of winter, when severe, and hence was a bad sty-pig. These swine, however, attracted the attention of breeders to the improvement of their form, for they possessed one excellent quality. They were quicker feeders, and fattened more rapidly than many pigs more promising in external appearance. The improvement that ultimately proved successful was a cross with the true Berkshire.

SHROPSHIRE.—The original pigs of this county were of a white or brindled color; the head was long and coarse, the ear large and flabby, and the hair wiry—the leg also too long and the weight of the bone great. A cross with the Berkshire and original Chinese has greatly improved this stock. The same may be said of the

WILTSHIRE breed, originally, it is believed, from Wales. They were long-bodied, low and hollow about the shoulder—high on the rump, of middling size, round-limbed; large pointed ear; of

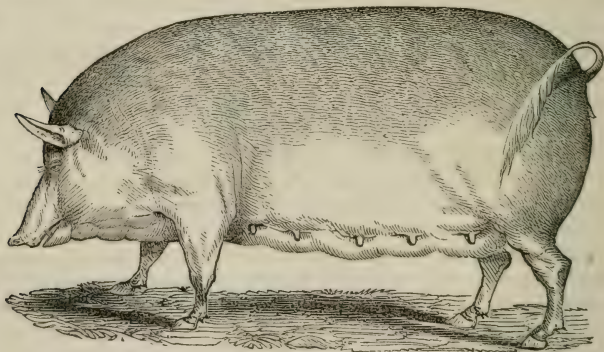
a light color. Of itself, of comparatively little value, but like the preceding breed, an excellent cross with the Berkshire stock.

HEREFORDSHIRE.—Generally supposed to be the result of a cross with the Shropshire; it is shorter in the body, carries less bone than that breed, has also a lighter head, a smaller ear, a less rugged coat, and is altogether a far more valuable animal. This hog is little inferior to the Berkshire breed.

GLOUCESTERSHIRE.—The Gloucestershire hogs are somewhat less in size than the preceding, and are also shorter in the body, rounder both in frame and limb, and altogether more compactly built. They make good store hogs, and their pork is of prime quality.

NORTHAMPTONSHIRE, of a light color, of a handsome shape, light and small ear, little bone, deep-sided and compactly formed. This is a profitable porker and a good store, for he feeds well, fattens rapidly, and arrives early at maturity.

NORFOLK.—A small breed, with pricked erect ears; color various, but generally white. The white colored are said to be the best; when striated or blue, the breed is inferior, at least generally so. This is a short-bodied and compactly formed pig, and is an excellent porker. There is another Norfolk variety, of larger size, spotted, but inferior in point of delicacy.



THE LEICESTER SOW.

LEICESTERSHIRE.—An ancient breeding district, and once greatly celebrated for its swine. The old stock were large-sized, deep

in the carcass, and flat-sided ; head and ear light and handsome ; color light spotted.

LINCOLNSHIRE.—The old LINCOLNSHIRE breed was light colored, or even white, with, in most specimens, a curly and woolly coat, of medium size ; good feeders, came early to maturity, and fattened easily.

THE ESSEX was in former days a very capital hog, but degenerated, and, of course, lost the esteem of breeders. A recollection of the former good qualities which characterized the breed induced some persons of practical judgment to revive it, which was accordingly done ; and now this hog, under the name of

THE IMPROVED ESSEX, ranks, most justly, very high amongst our British breeds of swine. The improvement of this hog is due to a cross with the NEAPOLITAN ; and this cross has been so frequently resorted to, that the pure ESSEX breed and the NEAPOLITAN are so much alike that it is not every cursory observer who is capable of discriminating between them. It is probable, also, that the Chinese was employed in the regeneration. The ESSEX hog is up-eared ; has a long, sharp head ; a long and level carcass, with small bone ; color most frequently black, or black and white. This is a quicker feeder, but he requires a greater proportion of food than the weight he attains to justifies ; besides which, he is troublesome in a fold, being restless and discontented. The pure breed should be almost bare of hair, and black in color.

There is another improved Essex breed called the *Essex half blacks*, resembling that which I have described in color, said to be descended from the Berkshire. This breed was originally introduced by Lord Western, and obtained much celebrity. They are black and white, short-haired, fine-skinned, with smaller heads and ears than the Berkshire, feathered with inside hair, a distinctive mark of both ; have short, snubby noses, very fine bone, broad and deep in the belly, full in the hind quarters, and light in the bone and offal. They feed remarkably quick, grow fast, and are of an excellent quality of meat. The sows are good breeders, and bring litters of from eight to twelve, but they have the character of being bad nurses.

THE SUSSEX.—Black and white in color, but not *spotted*, that is to say, these colors are distributed in very large patches ; one-half—say, for instance, the forepart of the body—white, and the hinder end black ; or sometimes both ends black, and the middle

white, or the reverse. These are no way remarkable; they seldom feed over 160 lbs.



THE ORIGINAL OLD ENGLISH BREED was not very unlike the Old Irish or Highland; long in the legs, large coarse ear, heavy head, rugged hair, and carrying too much bone to be profitable. This breed has yielded to the march of improvement; and, unless in parts of Cornwall, it would be difficult to discover a surviving specimen.

CHAPTER IV.

VARIETIES OF THE DOMESTIC HOG CONTINUED—CONTINENTAL VARIETIES.

OF the Continental varieties of the hog, the most important, and which requires our attention in the first instance, is

THE WESTPHALIAN.—This is the animal whose hams are so

much relished amongst us, and which, on that account, form no small item of the importations for which we are indebted to our German neighbors. The Westphalian hog requires little description, for he is a very near relative of the wild boar of his native country; and like that fierce and once formidable animal, usually roams at large in the forest, feeding chiefly upon beechmast and acorns, until slaughtered. The color of the adult Westphalian hog varies; but in every case whatever may be the hue of the parents, the young are, at birth and for some months afterwards, marked with the longitudinal bands characteristic of their wild blood. As to the improvement resulting from an occasional cross with the wild original, I refer to the animal under consideration. It is, in the first instance, to the *cross* that their excellent quality of flesh must be attributed.

The Westphalian swine are seldom over-fat; but they are not on that account to be deemed difficult to fatten. On the contrary, they will, if kept up, take fat with remarkable facility, and attain an enormous weight.

THE NEAPOLITAN SWINE.—This is a variety well worthy of attention, as a cross from it is productive of very remarkable improvement. The color of the Neapolitan swine is black, with no bristles, and little or no hair. The flesh of these swine is extremely delicately flavored, and the fat has not that rankness so objectionable in some other varieties; they are anything but hardy animals, not being able to endure our climate; it is merely as affording the opportunity of forming, by crossing, a valuable mixed breed, that they are deserving of notice. With the true Berkshire breed, the Neapolitan produces a cross, surpassed by none in every desirable quality, especially if a dash of the *white* Chinese be added. The intermixture of these breeds—the Neapolitan, Chinese, and Berkshire—may be regarded, if done judiciously, as the perfection of swine breeding. After having been a short time in this country, the Neapolitan hog begins to lose his naked appearance, and to acquire a coat better suitable to a more chilly climate.

THE FRENCH SWINE.—The French appear to have long known the value of a cross with the Chinese variety of hog, and most of their best breeds bear evidence of having, more or less, relationship to that animal. The most remarkable French breeds are, those of Poitou, the Pays d'Auge, Perigord, Champagne, and Boulogne.

The Poitou has a long and rather bulky head, with pendulous and somewhat coarse ears—an elongated body, broad and strong feet, and large bones ; its hair and bristles are harsh. That of the Pays d'Auge has a smaller head, with a sharp muzzle, narrow and pointed ears, long body, broad and strong limbs, but small bone—hair coarse, scanty in quantity, and of a white color. The Perigord swine are generally black—a very short and lumpy neck, with a broad and compact carcass. Those of Champagne are of considerable size, long-bodied and flat-sided, with a broad pendant ear. Those of BOULOGNE are related to the English breeds. Their color is usually white. They are of a large size, have a large broad ear, and are quick fatteners. It is to these swine that we are indebted for the celebrated Boulogne sausages.

CHAPTER V.

POINTS OF A GOOD HOG.

I WOULD caution the reader against being led away by mere *name*, in his selection of a hog. A hog may be called a *Berkshire*, or a *Suffolk*, or any other breed most in estimation, and yet may, in reality, possess none of this valuable blood. The only sure mode by which the buyer will be able to avoid imposition is, to make name always secondary to *points*. If you find a hog possessed of such points of form as are calculated to ensure early maturity, and facility of taking flesh, you need care little what it has seemed good to the seller to call him ; and remember that no *name* can bestow value upon an animal deficient in the qualities to which I have alluded. The true Berkshire—that possessing a dash of the Chinese and Neapolitan varieties—comes, perhaps, nearer to the desired standard than any other. The chief points which characterize such a hog are the following :—In the first place, sufficient depth of carcass, and such an elongation of body as will ensure a sufficient lateral expansion. Let the loin and breast be broad. The breadth of the former denotes good room for the play of the lungs, and a consequent free and healthy circulation, essential to the thriving or fattening of any animal. The bone should be small, and the joints fine—nothing is more indicative of high breeding than this ; and the legs should be no longer than, when

fully fat, would just prevent the animal's belly from trailing upon the ground. The leg is the least profitable portion of the hog, and we require no more of it than is absolutely necessary for the support of the rest. See that the feet be firm and sound; that the toes lie well together, and press straightly upon the ground; as, also, that the *claws* are even, upright, and healthy. Many say that the form of the head is of little or no consequence, and that a good hog may have an ugly head; but I regard the head of all animals as one of the very principal points in which pure or impure breeding will be the most obviously indicated. A high-bred animal will invariably be found to arrive more speedily at maturity, to take flesh earlier, and with greater facility, and, altogether, to turn out more profitably, than one of questionable or impure stock; and, such being the case, I consider that the head of the hog is, by no means, a point to be overlooked by the purchaser. The description of head most likely to promise, or rather to be the concomitant of, high breeding, is one not carrying heavy bone, not too flat on the forehead, or possessing a too elongated snout—the snout should be short, and the forehead rather convex, curving upwards; and the ear should be, while pendulous, inclining somewhat forward, and, at the same time, light and thin. Nor should the buyer pass over even the *carriage* of a pig. If this be dull, heavy, and dejected, reject him, on suspicion of ill health, if not of some concealed disorder actually existing, or just about to break forth; and there cannot be a more unfavorable symptom than a hung-down, slouching head. Of course, a fat hog for slaughter, or a sow heavy with young, have not much sprightliness of deportment.

Nor is color altogether to be lost sight of. In the case of hogs, I would prefer those colors which are characteristic of our most esteemed breeds. If the hair be scant, I would look for black, as denoting connection with the Neapolitan; but if too bare of hair, I would be disposed to apprehend too intimate alliance with that variety, and a consequent want of hardihood, that, however unimportant if pork be the object, renders such animals hazardous speculations as stores, from their extreme susceptibility of cold, and consequent liability to disease. If white, and not *too small*, I would like them, as exhibiting connection with the Chinese. If light or sandy, or red with black marks, I would recognize our favorite Berkshire; and so on, with reference to every possible variety of hue. These observations may appear trivial; but they are the

most important I have yet made, and the pig buyer will find his account in attending to them.

CHAPTER VI.

HOUSES AND PIGGERIES.

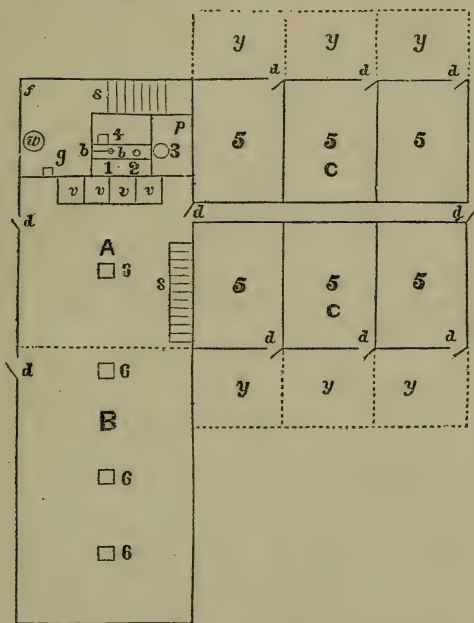
AN enclosure, proportionate to the number of swine which you intend to keep, and, if possible, so managed as to admit of extending the accommodation, will be found the best for general purposes. It should be provided with a range of sheds, so situated as to be thoroughly sheltered from wind and weather, paved at the bottom, and sloping outwards. Relative to the paramount necessity of cleanliness and dryness, let both enclosure and sheds possess the means of being kept so. In order to keep the sheds, which are designed as sleeping places, in a dry and clean state, an inclination outwards is necessary: a shallow drain should run along the whole of their extent, in order to receive whatever wet flows down the inclined plane of the sleeping huts: and provision should also be made for this drain to carry off all offensive matters beyond the precincts of the piggery.

The ground, on which the piggery is established, should likewise be divided into two parts, by a drain, which should run through it; and towards this drain each section should slope. This the main drain should be carried beyond the fold, and fall into a large tank or pit formed for that purpose. The object in view is to keep the pig-fold and styes in a clean and dry state, and to preserve the valuable *liquid manure*, which comes from the animals you keep. Some will probably inquire whether it would not be better to suffer the moisture to soak into earth or straw, or other substances on the *floor* of the enclosure, and then to clear all away periodically, than to drain off the liquid into a tank. By drawing off the liquid you add to the cleanliness of your swine, and, in proportion, to their health and capacity for thriving; and the collection of the liquid manure into tanks is less troublesome than the removal of substances, saturated with it, from the floor of the fold, would be.

The sties should be so constructed as to admit of being closed up altogether, when desirable; for swine, even the hardest breeds,

are susceptible of cold, and if exposed to it in severe weather, it will materially retard their fattening. The sty should be kept constantly supplied with clean straw. The refuse carted into the tank, will, in the form of manure, more than repay the value of the straw. It has been asserted, that swine do not thrive, if kept together upon the same ground in considerable numbers; this assertion rests on a want of ventilation and cleanliness.

As to *troughs*, let them be of stone or cast metal;—if of wood, the pigs will soon gnaw them to pieces;—and let them be *kept*



PIGGERY.

A, B, front; C, C, rear for pens; 5, 5, pens with alley between; v, v, v, v, vats on level with pens; 1, safety valve; 2, Steam pipe; 3, supply barrel to boiler; b, boiler; f, furnace; p, platform partly over boiler; 4, chimney; t, drain; w, water-cistern; g, door to cellar; s, s, stairs; d, d, doors; 6, 6, scuttles to cellar; y, y, yards to pens.

clean. Before each feeding, a pail of water should be dashed into the trough : this may be deemed troublesome, but it will confer *golden returns* on those who attend to it.

A supply of fresh water is essential to the well-being of swine, and should be freely furnished. Some recommend this to be effected by having a stream brought through the piggery ; and undoubtedly, when this can be managed, it answers better than any thing else. Swine are dirty feeders, and dirty drinkers, usually plunging their fore-feet into the trough or pail, and thus polluting with mud and dirt whatever may be given to them. One of the advantages, therefore, derivable from the stream of running water being brought through the fold is, its being, by its running, kept constantly clean and wholesome. If, therefore, you are unable to procure this advantage, it will be desirable to present water in vessels of a size to receive but one head at a time, and of such height as to render it impossible, or difficult, for the drinker to get his feet into it. The water should be renewed twice daily.

I have hitherto been describing a piggery capable of containing a large number ; a greater proportional profit will be realized by keeping a number of swine than a few. It may happen, however, that want of capital, or of inclination to embark in swine-feeding as an actual speculation, may induce many to prefer keeping a small number of pigs, or even perhaps one or two, in which case such accommodations as I have been describing would be more than superfluous. In this case, a single hut, well sheltered from wind and rain, and built with a due regard to comfort, to warmth, with a little court surrounding its door, in which the tenant may feed, obey the calls of nature, and disport himself, or bask in the sunshine, will be found to answer ; a small stone trough, or a wooden one, bound with iron, to preserve it from being gnawed to pieces, will complete the necessary furniture. The trough will serve alternately for food and drink. Even, however, when this limited accommodation is resorted to, a strict attention to cleanliness is no less necessary than when operations are carried on, on the most extensive scale. Both the floor of the hut and that of the little court should be paved, and should* incline outwards ; along the lowest side should be a drain, with a sufficient declination, and so contrived as to communicate with your dung-tank. The farther the manure-heap, or tank, from the dwelling, the better : vegetable matter, in progress of decomposition, gives rise to pestilential vapors, or miasmata.

When the weather is fine, a few hours' liberty will serve the health and the condition of your hog, and a little grazing would be all the better. Should you be desirous of breeding, and keep a sow for that purpose, you must, if you have a second hog, provide a second sty, for the sow will require a separate apartment when heavy in pig, and when giving suck. This may be easily effected by building it against that which you have already erected, thus saving the trouble of raising more walls than are absolutely necessary; and it need not have a court attached it, should it be inconvenient for you to have one, as the best accommodation can be given up to the breeding sow, and your pigs will do well enough with a single apartment, if not too confined, and have sufficient ventilation; and if you permit them the advantage of taking the air for a few hours daily. The extensive feeder should have a boiler of large size, properly fitted up, and an apparatus for steaming, as some vegetables are cooked in this mode more advantageously than by boiling. The poor man can use a pot as a substitute for a boiler, remembering in every case to clean it before using. Food should be presented to swine in a warm state—neither too hot nor too cold.

A sty should be about seven or eight feet square, and the court about ten feet. The second sty need not be more than six feet square, and does not absolutely require a court.

CHAPTER VII.

BREEDING, REARING, AND FEEDING.

IN the selection of a boar and sow for breeding, much more attention and consideration are necessary than people generally imagine. It is as easy, with a very little judgment and management, to procure a good as an inferior breed; and the former is infinitely more remunerative, in proportion to outlay, than the latter can possibly ever be.

In selecting the parents of your future stock, you must bear in mind the precise objects you may have in view, whether the rearing for pork, or bacon; and whether you desire to meet the earliest market, and thus realize a certain profit, with the least possible outlay of money, or loss of time; or whether you mean

to be contented to await a heavier, although somewhat protracted return.

If bacon, and the late market be your object, you will do well to select the large and heavy varieties, taking care that the breed has the character of being possessed of those qualities most likely to ensure a heavy return, viz: *growth*, and *facility* of taking fat, relatively possessed by each. To that description I refer my reader.

If your object be to produce pork, you will find your account in the smaller varieties: such as arrive with greatest rapidity at maturity, and which are likely to produce the most delicate flesh. In producing *pork*, it is not advisable that it should be *too fat*, without a corresponding proportion of lean; and, on this account, rather take a cross-breed sow than a pure Chinese stock, from which the over-fattening results might most naturally be apprehended. The Berkshire, crossed with Chinese, is about the best porker I can mention.

In every case, whether your object be pork or bacon, the points to be looked for are,—in the Sow, a small, lively head, a broad and deep chest, round ribs, conspicuous barrel, a broad loin, rolling almost to the hough, deep and broad loin, ample hips, and considerable *length* of body in proportion to its *height*. One qualification should ever be kept in view, and, perhaps, should be the first *point* to which the attention should be directed, viz.: *smallness of bone*.

Let the BOAR be less in size than the sow, shorter and more compact in form, with a raised and brawny neck, lively eye, small head, firm, hard flesh, and his neck well furnished with bristles,—in other respects, look for the same points as I have described in reference to the sow. Breeding within too close degrees of consanguinity, or, *breeding in and in*, is calculated to produce degeneracy in size, and also to impair fertility; it is therefore to be avoided, although some breeders maintain that a *first cross* does no harm, but, on the contrary, that it produces offspring which are disposed to arrive earlier at maturity, and take fat with greater facility. This may in some instances be the case; it is so with horned cattle, but as far as swine are concerned, it is not my own experience.

Differences of opinion exist as to the precise age of boar and sow, at which breeding is most advisable. They will, if permitted, breed at the early age of six or seven months; but this is a practice not to be recommended. My advice is, to let the sow be, *at least*, one year old, and the boar, *at least*, eighteen months; but,

if the former have attained her second year, and the latter his third, a vigorous and numerous offspring are more likely to result. The boar and sow retain their ability to breed for about five years, that is, until the former is upwards of eight years old, and the latter seven. I do not recommend using a boar after he has passed his fifth year, nor a sow after she has passed her fourth, unless she have prove proved a peculiarly valuable breeder; in which case, she might be suffered to produce two or three more litters. When you are done with the services of the boar, have him emasculated—an operation that can be performed with perfect safety at any age,—fatten or sell him. When it is no longer desirable to breed from the sow, kill her. Before doing so, it is a good plan to put her to the boar, as she takes fat afterwards more rapidly than she otherwise would.

If a sow be of a stock characterized by an unusual tendency to take fat, it is well to breed from her at an unusually early age,—say eight or nine months; for this tendency to fat, in a breeding sow, is highly objectionable, as conducing to danger in parturition. Let her have the boar a couple of days after pigging, and let her breed as frequently as she is capable of doing. This will effectually check the tendency to fat; and, after having taken a few litters from her, you will find the rapidity with which, should you desire her for the butcher, she will take flesh, quite extraordinary. In the case of such a sow, do not give the boar before putting her up to fatten.

Feed the breeding boar well; keep him in high condition, but not fat: the sow, on the other hand, should be kept somewhat low, until after conception, when the quantity and quality of her food should be gradually increased. The best times for breeding swine are, the months of March, and July or August. A litter obtained later than August has much to contend with, and seldom proves profitable; some, indeed, state that when such an occurrence does take place, whether from accident or neglect, the litter is not worth keeping. It is little use, however, to throw any thing away. Should the reader at any time have a late litter, let him leave them with the sow; feed both her and them with warm and stimulating food, and he will thus have excellent pork, with which to meet the market, when that article is at once scarce and dear, and consequently profitable. By following this system of management, he will not only turn his late litter to account, but actually

realize almost as good a profit as if it had been produced at a more favorable season.

The period of gestation in the sow varies : the most usual period during which she carries her young, is four lunar months, or sixteen weeks, or about one hundred and thirteen days. M. Teissier, of Paris, a gentleman who paid much attention to this subject, in connexion not merely with swine, but other animals, states that it varies from one hundred and nine to one hundred and forty-three days ; he formed his calculation from the attentive observation of twenty-five sows.

The sow produces from eight to thirteen young ones at a litter, sometimes even more. Extraordinary fecundity, is, however, not desirable, for a sow cannot give nourishment to more young than she has teats for, and, as the number of teats is twelve, when a thirteenth one is littered, he does not fare very well. The sufferer on these occasions is of course the smallest and weakest ; a too numerous litter are all indeed generally undersized and weakly, and seldom or never prove profitable ; a litter not exceeding ten will, usually, be found to turn out most advantageously. On account of the discrepancy subsisting between the number farrowed by different sows, it is a good plan, if it can be managed, to have more than one breeding at the same time, in order that you may equalize the number to be suckled by each. The sow seldom recognizes the presence of a strange little one, if it have been introduced among the others during her absence, and have lain for half an hour or so amongst her own offspring in their sty.

While the sow is carrying her young, feed her abundantly, and increase the quantity until parturition approaches within a week or so, when it is as well to diminish both the quantity and quality. While she is giving suck you cannot feed too well. You may wean the young at eight weeks old, and should remove them for that purpose from the sow ; feed them well, frequently, abundantly, *but not to leaving*, and on moist, nutritious food, and pay particular attention to their lodgment—a warm, dry, comfortable bed is of fully as much consequence as feeding, if not even of more. Should the sow exhibit any tendency to devour her young, or should she have done so on a former occasion, strap up her mouth for the first three or four days, only releasing it to admit of her taking her meals. Some sows are apt to lie upon, and crush their young. This may be best avoided by not keeping the sow too fat or heavy, and by not leaving too many young upon

her. Let the straw forming the bed also be short, and not in too great quantity, lest the pigs get huddled up under it, and the sow unconsciously over-lie them in that condition.

The young pigs should be gradually fed before permanently weaning them ; and for first food, nothing is so good as milk, which may be succeeded by ordinary dairy wash, thickened with oat or barley meal, or fine pollard ; this is better scalded, or, better still, boiled. To the sow, some dry food should be given once daily, which might consist of peas, beans, Swedish turnips, carrots, parsnips, or the like, either well boiled, or raw ; but I prefer the food to be *always* boiled, or, what is still better, *steamed*. Some wean the pigs within a few hours after birth, and turn the sow at once to the boar. Under certain circumstances, this may be found advantageous ; but I think that the best mode of management is to turn the boar into the hog-yard, about a week after parturition, at which time it is proper to remove the sows for a few hours daily from their young, and let them accept his overtures when they please. It does not injure either the sow or her young if she take the boar while suckling, but some sows will not do so until the drying of their milk.

CASTRATION and SPAYING should be only performed on such as you intend to keep, as you do not know what a purchaser's wishes on the subject might be. It is, of course, unnecessary for me to give any directions as to the mode of performing this operation, as no amateur should attempt it, and men who make the practice their means of livelihood, are, in every district, not difficult to be got at, or exorbitant in their terms. The sow is, if desirable, to be spayed while suckling ; the boar, as I have already stated, may be castrated at any age with perfect safety.

At weaning time, RING the young pigs. This operation must be a painful one, but scarcely so much so as the little sufferers would seem to indicate. RINGING is, however, absolutely necessary, unless the cartilage of the nose be *cut away*, a practice resorted to in substitution for it in some parts of England ; the latter practice is, however, far more cruel than ringing, and its efficacy is by many stated to be at the best questionable.

After about five weeks' high and careful feeding subsequent to weaning, the young pigs may be put up for stores, porkers, &c., according to your views respecting them. Very young pigs, immediately after being weaned, if fed on the refuse of a dairy, will be brought up for delicious pork in five or six weeks ; for the last

week, prior to killing, the addition of grains or bruised corn will impart a degree of firmness to the flesh, that is considered an improvement. This is called "dairy-fed pork," and it never fails to fetch an enhanced price, thereby amply remunerating its producer.

Hogs designed for pork should not be fattened to the same extent as those designed for bacon. I am aware that it will be vain for me to request the reader not to do so, as fat produces weight—weight, profit—and profit is the object of the feeder. But to those who feed for domestic consumption, I urge the suggestion, and they will find their account in following it. Porkers should be suffered to run at large. Grazing, or the run of a wood in which roots or nuts may be met with, is calculated in an eminent degree to improve the quality of their flesh. It will be necessary to give the hogs regular meals, independent of what they can thus cater for themselves; and the hours for so doing should be in the morning, before they are let out, and in the evening, before they are returned to their sty. Too many swine should not be kept in one sty; and if one become an object of persecution to the rest, he should be withdrawn. The introduction of strangers should likewise be avoided.

Bacon hogs fatten best by themselves; they need no liberty; and it is only necessary to keep the sty dry and clean, and to feed abundantly, in order to prepare them for the knife. In order to fatten a hog, his *comforts* must in every respect be attended to.

Those who make pork-feeding a business, and consequently keep a number of these animals, should so manage as to be enabled to provide for their maintenance and fattening from the produce of their crops. They should therefore raise the potato, beans, peas, barley, buckwheat, flax, parsnips, carrots, cabbage, lettuce, Lucerne, Italian rye-grass, clover, rape, chicory, and vetches. Nor are we to forget the important articles, mangold and Swedish turnips; the latter especially, as being an article that sad necessity has recently, for the first time, brought into the full degree of notice it has always deserved;—and an article that is now found to be no less valuable for human food than it is admitted to be for the food of cattle.

The best possible mode of feeding hogs is with a mixture of two or more of the roots or plants enumerated, well steamed, and a little meal or bran added, or, instead of meal or bran, add brewer's grains, wash, half malted barley, pollard, &c.,—let these be well-boiled and given moderately cool, and in a moist state.

The advantages derivable from the use of hay-tea in storefeeding hogs was, I think, for the first time demonstrated to the public, some years ago, by Mr. Saunders, of Stroud, in Gloucestershire. Mr. Saunders was induced to try this diet with hogs, from an observation of its efficacy in weaning calves; his experiments were attended with the most unqualified success.

The use of flax-seed, as an addition to the other food for fattening swine, has been recommended, but is found not to answer nearly so well in the crude state as previously kiln-dried, and well crushed, so as to crack the seed, otherwise the animal will pass a large proportion of the seed in a whole state; the whole seed acts as a purgative and diuretic, which will be opposed to the secretion of fat. To prepare the seed for food, steep them for twelve hours in water, which may be poured on them in a tepid state, but not at boiling heat; and, prior to giving the mess, add as much lukewarm wash as will bring it to the consistence of gruel. This wash may be produced from brewer's grains, or simply from mangold or Swedish turnips, well boiled and mashed, and given with the water in which they have been boiled: the addition of a proportion of bran improves the mess, and when one has it, it should not be omitted.

The adoption of hay-tea as the vehicle for mixing these ingredients, will be found also advantageous. Do not *boil* the flax seed—boiling will produce a coarse, tough and not very digestible mass; but steeping, on the contrary, furnishes a rich and nutritious jelly. Linseed cake is a good substitute for the seed, and is to be given in a proportion of fourteen pounds, for seventeen or eighteen pounds of ground seed. Neither should be given, except in combination with a large proportion of other substances, as they are of a very greasy nature, and are apt to impart a rank flavor to flesh, if given in an unmixed state, and are actually more efficacious in combination. If you have plenty of meal, the addition of a little to the daily feeds, will be found to tell well, especially towards the close of fattening, a few weeks previous to transferring your stock to the butcher.

The refuse of mills form a very valuable item in swine food, when mixed with such boiled roots as I have enumerated;—as starch sounds, the refuse from the manufacture of that article; also the fibrous refuse remaining from the manufacture of potato starch.

Swine are frequently kept by butchers, and are then fed principally upon the garbage of the shambles,—as entrails, the paunch-

es, lights, and the viscera of sheep and cattle, as well as the blood. Swine are, like their human owners, omnivorous, and few articles come amiss to them. It must, nevertheless, be confessed, that the flesh of hogs fed on animal food is rank both in smell and taste, and readily distinguishable from that produced from a vegetable diet. I am not unnecessarily prejudiced, and it is on the *merits* of the case alone that I condemn butcher-fed pork. Pork butchers, resident in large towns, are very apt to feed chiefly on offal of all sorts, including that arising from the hogs daily slain and dressed for the market.

There is yet another description of feeding: I allude to the feeding of swine in knackers' yards. The animals are kept in considerable numbers, and are fed wholly upon the refuse of dead horses—chiefly the entrails, the carcass being in too great demand among those who keep dogs, to permit of it being unnecessarily wasted. Nor are these horses always *fresh*, the swine revelling in *corruption*, and disputing with the maggot the possession of a mass of liquid putrefaction. And are we to say nothing of the number of horses who die of glanders, farcy, or some similarly frightfully contagious and incurable disorder? How can we be certain that this is not one of the many sources whence occasionally spring apparently causeless pestilences, or malignant epidemics? While such a practice is tolerated, with what caution should we not purchase bacon or pork, lest we should thus eat at second-hand of substances so revolting to the feelings, so dangerous to individual and public health.

CHANDLER'S GREAVES are likewise objectionable as food for swine, unless given in comparatively small quantities, and mixed with bran, meal, and boiled roots. If fed wholly on either greaves, or oil-cake, or flax-seed, the flesh becomes loose, unsubstantial, and carrion; and gives out a flavor resembling that of rancid oil.

Hogs that have been fed chiefly on corn, alternated with the vegetable diet already described, produce pork nearly equal in delicacy of flavor, whiteness of color, and consequent value, to that well-known, delicious article, DAIRY PORK. INDIAN CORN is most useful in *feeding* and in *fattening* pigs; it should be employed in conjunction with oat or barley meal, or some other equally nutritious matter.

Respecting the *quality of food*, vast numbers of bacon hogs are almost invariably fed upon potatoes; but however apparently satisfactory may be their weight and condition, yet when slaughtered

immediately, or before having several weeks of substantial food, to harden their flesh, they are always found inferior to corn-fed pork and bacon, the fat having a tallowy appearance, of an insipid taste, and shrinking for want of firmness; whereas, when boiled, it should be transparently hard, with a tinge of pink in its color, the flavor should be good, and the meat should swell in the pot. Potatoes, therefore, though fine food for stores, should never be used *alone* as sustenance in the fattening of bacon hogs; for, in proportion to the quantity employed, it will render the flesh, and consequently the price, inferior to that of hogs which have been properly fed. They are, however, frequently employed, when steamed, in conjunction with either tail, or stained barley, coarsely ground; and farmers who grow potatoes for the market may thus profitably dispose of the chaffs along with their unmarketable corn: but those persons who wish to acquire a reputation for producing fine bacon, should never use anything for fattening but hard meat, together with skim-milk, if it can be procured.

When swine are not of very large size, and it is desirable to raise pork rather than bacon, a very economical mode of feeding may be advantageously employed:—it consists of equal parts of boiled Swedish turnips and bran. If it be desirable to render the accumulation of fat more rapid, let Indian meal be substituted for the bran, and, in flax-growing countries, the seed prepared as already directed.

A hog WASHED WEEKLY WITH SOAP AND A BRUSH will be found to thrive, and put up flesh in a ratio of at least five to three, in comparison to a pig not so treated. This fact has been well tried, there can be no possible question about its correctness, and the duty is not a very difficult matter to perform, for the swine, as soon as they discover the real character of the operation, are far from being disposed to object, and after a couple of washings, submit with the best grace imaginable.

BEWARE NOT TO SURFEIT your hogs. It is quite possible to give too much even to them, and to produce disease by over-feeding.

Many examples of great weights, produced by judicious feeding and management, are upon record. Mr. Crockford's Suffolk hog, at two years old, weighed 980 lbs.; but I scarcely think it could have been *true Suffolk*, that being a small breed. Mr. Ivory's Shropshire hog weighed fourteen hundred, *when killed and dressed*, and there was, a short time since, a specimen of the *improved Irish breed of hog* exhibited in Dublin, at the Portobello Gardens, which

weighed upwards of twelve hundred weight; this, when killed, would have amounted to something over half a ton.

In conclusion, observe caution in conjunction with the directions already given relative to feeding.

I. AVOID FOUL FEEDING.

II. DO NOT OMIT ADDING SALT in moderate quantities to the mess given: you will find your account in attending to this.

III. FEED AT REGULAR INTERVALS.

IV. CLEANSE THE TROUGHS PREVIOUS TO FEEDING.

V. DO NOT OVER-FEED; give only as much as will be consumed at the meal.

VI. VARY YOUR BILL OF FARE. Variety will create, or, at all events, increase appetite, and it is further most conducive to health; let your *variations* be guided by the state of the *dung cast*: this should be of medium consistence, and of a greyish-brown color; if *hard*, increase the quantity of bran and succulent roots; if too liquid, diminish, or dispense with bran, and let the mess be firmer; if you can, add a portion of corn, that which is injured, and thus rendered unfit for other purposes, will be found to answer well.

VII. FEED YOUR STOCK SEPARATELY, in classes, according to their relative conditions; keep sows in young by themselves; stores by themselves; and bacon hogs and porkers by themselves. It is not advisable to keep your stores too high in flesh, for high feeding is calculated to retard development of form and bulk. It is better to feed pigs intended to be put up for bacon, *loosely*, and not too abundantly, until they have attained their full stature; you can then bring them into the highest possible condition in an inconceivably short space of time.

VIII. DO NOT REGRET THE LOSS OR SCARCITY OF POTATOES so far as swine-feeding is concerned. Its loss has been the means of stimulating inquiry and producing experiment, which has resulted in the discovery that many other superior vegetables have been hitherto neglected and foolishly passed aside.

IX. DO NOT NEGLECT TO KEEP YOUR SWINE CLEAN, DRY, AND WARM. These are *essentials*, and not a whit less imperative than feeding, for an inferior description of food will, by their aid, succeed far better than the highest feeding will without them; and suffer me to reiterate the benefit derivable from *washing* your hogs; this will repay your trouble manifold.

X. WATCH THE MARKETS.—*Sell* when you see a reasonable

profit before you. Many and many a man has swamped himself by giving way to covetousness, and by desiring to realize an unusual amount of gain : recollect how very fluctuating are the markets, and that a certain gain is far better than the risk of loss.

CHAPTER VIII.

TIME REQUISITE FOR FEEDING FAT—QUANTITY OF FOOD—AND PROPORTIONATE INCREASE OF WEIGHT IN A GIVEN TIME.

THIS will, of course, vary very considerably, according to the weight, age, breed, and condition of the store when first put up, as well as the description of food on which, up to that period, the animal has been fed. The same observations are applicable to the *quantity* of food required for the production of fat.

If a young store, five or six weeks may be sufficient ; if older, six or eight ; and if of the mature age, intended for a perfect bacon hog, of that moderate degree of size and fatness which is preferred for the general consumption of the middle classes, from twelve to fourteen. A bacon hog, if intended to be thoroughly fattened for farm use, should, however, be of a large breed, and brought to such a state as not to be able to rise without difficulty, and will, perhaps, require five or six months, or even more, to bring him to that condition. This, however, supposes him to be completely fat ; to ascertain which with perfect accuracy, he ought to be weighed every week during the latter part of the process ; for although his appetite will gradually fall off as he increases in fat, yet the flesh which he will acquire will also diminish, until *at last it will not pay for his food*, and he should then be immediately slaughtered. Thus the increase of flesh in a hog put up to be fattened, and regularly weighed, was, on the following dates :—

				stone.	lbs.	
" Oct.	10	..	..	36	7	
	24	..	..	41	5	.. 38 lbs. gain.
Nov.	7	..	..	45	7	.. 34 do.
	21	..	..	47	2	.. 11 do.
Dec.	5	..	..	48	7	.. 13 do.
	22	..	..	48	6	.. 1 lb. loss.

CHAPTER IX.

DISEASES OF SWINE.

IN order to prescribe, with any reasonable hopes of success, for any animal, a knowledge of that animal's anatomy, physiology, and habits when in health, are indispensable, and an intimate acquaintance with the characters of the substances employed as remedies. I would not recommend you to place much confidence in books published by quacks, and purporting to contain infallible specifics for the several diseases to which live stock are liable. Veterinary text-books, written by competent persons, are very different things. A host of honorable names stand upon record, on the face of their publications, in proof of the correctness of my assertion. By diligent study of these books, farmers might, I have little doubt, eventually arrive at a very respectable share of veterinary knowledge; acquire a tolerable idea of the internal structure of the several inhabitants of the farm-yard, and of their physiology; by practical observation they would become able to detect the presence of disease from the symptoms present, and be then able to adopt a course of treatment as might be suggested in the books they possessed. Under these circumstances, apply, if possible, to a regular veterinary surgeon.

Swine are by no means the most tractable of patients. It is anything but an easy matter to compel them to swallow anything to which their appetite does not incite them, and hence, 'PREVENTION' will be found 'BETTER THAN CURE.' CLEANLINESS is, in my opinion, the great point to be insisted upon in swine management; if this, and warmth, be duly attended to, the animal will not, save in one case, perhaps in a hundred, become affected with any ailment.

As, however, even under the most careful system of management, an occasional disappointment may occur, the reader is furnished with the following brief view of the principal complaints, by which some are, *under the most unfavorable circumstances*, liable to be attacked, and the plainest effectual mode of sanatory treatment, in such cases, to be adopted.

The principal diseases to which swine are liable are :—1, Fever; 2, Leprosy; 3, Murrain; 4, Measles; 5, Jaundice; 6, Foul skin; 7, Mange; 8, Staggers; 9, Cracklings; 10, "Ratille," or swelling

of the spleen ; 11, Indigestion, or Surfeit ; 12, Lethargy ; 13, Heavings ; 14, " Diarrhœa ;" 15, Quinsy ; 16, Tumors ; 17, Catarrh.

All which dangerous, and often fatal, maladies may be PREVENTED from occurring by the simple attention to cleanliness already recommended, with judicious feeding. A hog can be relieved by bleeding, when such an operation will effect relief, whether he like to submit or not ; but it is very questionable whether he can be compelled to swallow medicines without his perfect consent and concurrence ; these, therefore, will best be administered by stratagem, and the hog's *appetite* is the only assailable point he has.

I. FEVER.—The symptoms are, redness of the eyes, dryness and heat of the nostrils, the lips, and the skin generally ; appetite gone, or very defective, and the presence, usually, of a very violent thirst. Of course, no symptom can be regarded as individually indicative of the presence of any particular disease ; these, which I have named, might, individually, indicate the presence of many other disorders, nay, of no disorder at all, but collectively, they point to the presence of fever as their origin.

Let the animal, as soon as possible after the appearance of these symptoms, be bled, by cutting the veins at the back of his ears. The pressure of the finger raises the vein, and you can then puncture it with a lancet. If the bleeding from this channel be not sufficiently copious, you must cut off a portion of his tail ; and after bleeding let him be warmly housed, but, at the same time, while protected from cold and draughts, let the sty be well and thoroughly ventilated, and its inmate supplied with a constant succession of fresh air. The bleeding will usually be followed, in an hour or two, by such a return of appetite as to induce the animal to eat a sufficient quantity of food to admit of your making it the vehicle for administering such internal remedies as may seem advisable. The best vehicle is bread, steeped in broth. The hog, however, sinks so rapidly, when once he loses his appetite, that no depletive medicines are in general necessary or suitable ; the fever will usually be found to yield to the bleeding, and your only object need be the support of the animal's strength, by small portions of nourishing food, administered frequently.

Do not, however, at any time suffer your patient to eat as much as his inclination might prompt ; the moment he appears to be no longer *ravenous*, remove the mess, and do not offer it again until

after a lapse of from three to four hours. It is a singular fact, that as the hog surpasses every other animal in the facility with which he acquires fat, he likewise surpasses all others in the rapidity with which his strength becomes prostrated when once his appetite deserts him. The French veterinarian practice recommends the addition of peppermint to the bread and broth. If the animal be not disgusted by the smell, it may be added; and if the bowels be confined, the addition of castor and linseed oil, in equal quantities, and in the proportion of two to six ounces, according to the size of the hog, should not be omitted.

If you find yourself unable to restore the animal's appetite, the case is nearly hopeless, and you may regard its return as one of the most infallible symptoms of returning convalescence. It is, however, *possible* to administer medicine to the pig by *force*; although, for my own part, I cannot say that I have ever found it practicable.

There is a description of fever that frequently occurs as an epizootic. It often attacks the male pigs, and generally the most vigorous and the best-looking, without any distinction of age, and with a force and promptitude absolutely astonishing; for in the space of twelve hours, I have sometimes seen a whole piggery succumb: at other times its progress is much slower; the symptoms are less intense and less alarming; and the veterinary surgeon, employed at the commencement of the attack, may promise himself some success.

THE CAUSES OF THE DISEASE are, in the majority of cases, the BAD STIES in which the pigs are lodged, and the noisome food which they often contain. The food which the pigs meet with and devour are the remains of mouldy bread and fruit, especially those of peas and lentils—the fermentation and decomposition of which farinaceous substances, and especially the bran which is too frequently given to them, and the prolonged action of which determine the most serious in the whole economy. In addition to this, is the constant lying on the dung heap, whence is exhaled a vast quantity of deleterious gas; also, where they remain far too long, on the muddy or arid ground, or are too long exposed to the rigor of the season.

As soon as a pig is attacked with disease, he should be separated from the others, placed in a warm situation, some stimulating ointment be applied to the chest, and a decoction of sorrel administered. Frictions of vinegar should be applied to the dorsal

and lumbar region. The drinks should be emollient, slightly imbued with nitre and vinegar, and with aromatic fumigation about the belly. If the fever now appears to be losing ground, which may be ascertained by the regularity of the pulse, by the absence of the plaintive cries that were before heard, by a respiration less laborious, by the absence of convulsions, and by the non-appearance of blotches on the skin, there is a fair chance of recovery. We may then be content to administer, every second hour, the drinks and the lavements already prescribed, and to give the patient his proper allowance of white water, with ground barley and rye. When, however, instead of these fortunate results, the symptoms are redoubling in intensity, it will be best to destroy the animal; for it is rare that, after a certain period, there is much or any chance of recovery. Bleeding, practised at the ear or tail, is seldom of much avail, but occasionally produces considerable loss of vital power, and augments the putrid diathesis.

II. LEPROSY.—The symptoms of this complaint usually commence with the formation of a small tumor in the eye, followed by general prostration of spirits; the head is held down; the whole frame inclines towards the ground: universal languor succeeds; the animal refuses food, languishes, and rapidly falls away in flesh; blisters soon make their appearance beneath the tongue, then upon the throat, the jaws, the head, and the entire body. The flesh of a leprous pig is said to possess most pernicious qualities, and to be wholly unfit for human food. If the animal be killed in the very first stage of the disease, however, the affection is only superficial, the flesh nothing the worse, but rather improved in tenderness, and indeed, not to be distinguished from that of a perfectly sound animal. The cause of this disease is want of cleanliness, absence of fresh air, want of due attention to ventilation, and foul feeding. The obvious cure therefore is—first, bleed; clean out the sty daily; wash the affected animal thoroughly with soap and water, to which soda or potash has been added; supply him with a clean bed; keep him dry and comfortable; let him have gentle exercise and plenty of fresh air; limit the quantity of his food, and diminish its rankness; give bran with wash, in which you may add, for an averaged sized hog, say one of 160lbs. weight, a tablespoon full of the flour of sulphur, with as much nitre as will cover a sixpence, daily. A few grains of powdered antimony may also be given with effect.

III. MURRAIN.—Resembles leprosy in its symptoms, with the

addition of staggering, shortness of breath, discharge of viscid matter from the eyes and mouth. The treatment should consist of cleanliness, coolness, bleeding, purging, and limitation of food. Cloves of garlic have been recommended to be administered in cases of murrain. Garlic is an antiseptic, and as, in all those febrile diseases, there exists a more or less degree of disposition to putrefaction, it is not improbable that it may be found useful.

IV. MEASLES.—This is one of the most common diseases to which hogs are liable. The symptoms are, redness of the eyes, foulness of the skin, depression of spirits, decline, or total departure of the appetite, small pustules about the throat, and red and purple eruptions on the skin. These last are more plainly visible after death, when they impart a peculiar appearance to the grain of the meat, with fading of its color, and distension of the fibre so as to give an appearance similar to that which might be produced by puncturing the flesh.

Suffer the animal to fast, in the first instance, for twenty-four hours, and then administer a warm drink, containing a drachm of carbonate of soda, and an ounce of bole armenian; wash the animal, cleanse the sty, and change the bedding; give at every feeding, say thrice a day, thirty grains of flour of sulphur, and ten of nitre. It is to dirt, combined with a common fault, too little thought of, viz. giving the steamed food or wash to the hogs at too high a temperature, that this disease is generally to be attributed. It is a troublesome malady to eradicate, but usually yields to treatment, and is rarely fatal.

V. JAUNDICE.—Symptoms, yellowness of the white of the eye, a similar hue extending to the lips, with sometimes, but not invariably, swelling of the under part of the jaw. Bleed behind the ear, diminish the quantity of food, and give a smart aperient every second day. Aloes are, perhaps, the best, combined with colocynth; the dose will vary with the size of the animal.

VI. FOUL SKIN.—A simple irritability or foulness of skin will usually yield to cleanliness, and a washing with solution of chloride of lime, but if it have been neglected for any length of time, it assumes a malignant character, scabs and blotches, or red and fiery eruptions appear, and the disease rapidly passes into

VII. MANGE.—If the foul hide, already described, had been properly attended to, and the remedies necessary for its removal applied in sufficient time, this very troublesome disorder would not have supervened. MANGE is supposed, by most medical men, to

owe its existence to the presence of a minute insect, called "*acarus scabiei*," or "mange-fly," a minute creature, which burrows beneath the cuticle, and, in its progress through the skin, occasions much irritation and annoyance. Others, again, do not conceive the affection styled mange to be thus produced, but refer it to a diseased state of the blood, which, as is usually the case, eventually conveys its morbid influences to the superficial tissues. Much has been, and still might be said on both sides of the question, but such a discussion is scarcely suitable to the pages of a popular work. The *Symptoms* of the disease are sufficiently well known, consisting of scabs, blotches, and sometimes multitudes of minute pustules, on different parts of the body. If neglected, these symptoms will become aggravated; the disease will rapidly spread over the entire surface of the skin, and if suffered to proceed upon its course, unchecked, it will ere long produce deep-seated ulcers, and malignant sores, until the whole carcass of the poor affected animal becomes one mass of corruption.

THE CAUSES OF MANGE have been differently stated; some referring them to too high, and others to too low a diet. The cause is to be looked for in *dirt*, accompanied by *hot-feeding*; hot-feeding alone would, perhaps, be more likely to produce *measles* than *mange*, but *dirt* would unquestionably produce the latter disease, even if unaided by the concomitant error of hot-feeding.

Hogs, however well and properly kept, will occasionally become affected with this, as well as with other disorders, from *contagion*. Few diseases are more easily propagated by *contact* than mange. The introduction of a single affected pig into your establishment may, in one night, cause the seizure of scores, and, probably, furnish you with a three months' hospital experience. Do not, therefore introduce any foul-skinned pigs into your piggery; in fact, it would be a very safe proceeding, to wash every new purchase with a strong solution of *chloride of lime*. This substance is very cheap, and a little trouble, when applied as a preventive, is surely preferable to a great deal of both trouble, and, perhaps, *disappointment* when you are compelled to resort to it to cure.

If a hog be only afflicted with a mange of moderate virulence, and not of *very long standing*, the best mode of treatment to be adopted, is—

1. Wash the animal from snout to tail, leaving no portion of the body uncleansed, with *soft soap* and water.

2. Put him into a dry and clean sty, which is so built and

situated as to command a constant supply of fresh air, without, at the same time, being exposed to cold or draught; let him have a bed of clean, fresh straw.

3. Reduce his food, both in quality and in quantity; let boiled or steamed roots, with buttermilk, or dairy wash, supply the place of half-fermented brewer's grains, house wash, or any other description of feeding calculated to prove of a heating or inflammatory character. It is, of course, scarcely necessary to add, that those who have been feeding their swine on *horseflesh*, or chandler's greaves, cannot be surprised at the occurrence of the disease; let them, at all events, desist from that rank and nasty mode of feeding, and turn to such as has been indicated.

4. Let your patient fast for five or six hours, and then, give to a hog of average size—epsom salts, 2oz. in a warm bran wash. This quantity is, of course, to be increased or diminished, as the size may require. The above would suffice for a hog of 160lbs. It should be previously mixed with a pint of warm water. This should be added to about half a gallon of warm bran wash. It will act as a gentle purgative.

5. Give in every meal afterwards—of flour of sulphur, one tablespoon; of nitre, as much as will cover a sixpence, for from three days to a week, according to the state of the disease. When you perceive the scabs begin to heal, the pustules to retreat, and the fiery sores to fade, you may pronounce your patient cured. But before that pleasing result will make its appearance, you will perceive an apparent increase of violence in all the symptoms—the last effort of the expiring malady, as it were, ere it finally yields to your care and skill.

6. There are, however, some very obstinate cases of mange occasionally to be met with, which will not so readily be subdued. When the above mode of treatment has been put in practice for fourteen days, without effecting a cure, prepare the following: Train oil, one pint; oil of tar, two drachms; spirits of turpentine, two drachms; naphtha, one drachm; with flour of sulphur, as much as will form the above into the consistence of a thick paste. Rub the animal, previously washed, with this mixture—let no portion of the hide escape you. Keep the hog dry and warm after this application, and suffer it to remain on his skin for three entire days. On the fourth day, wash him once more with soft soap, adding a small quantity of *soda* to the water. Dry the animal well afterwards, and suffer him to remain as he is, having again

changed his bedding, for a day or so : continue the sulphur and nitre as before. I have never known any case of mange, however obstinate, that would not, sooner or later, give way before this mode of treatment.

7. Your patient being convalescent, white-wash the sty ; fumigate it, by placing a little chloride of lime in a cup, or other vessel, and pouring a little vitriol upon it. In the absence of vitriol, however, boiling water will answer nearly as well.

Finally, all mercurial applications are, as much as possible, to be avoided ; but, above every thing, avoid the use of ointments composed of *hellebore*, corrosive sublimate, or tobacco-water, or, in short, any *poisonous* ingredient whatever ; very few *cures* have ever been effected by the use of these so called remedies, but very many *deaths* have resulted from their adoption.

VIII. STAGGERS, caused by excess of blood to the head ; bleed freely from behind the ears, and purge.

IX. CRACKINGS will sometimes appear on the skin of a hog, especially about the root of the ears and tail, and at the flanks. These are not at all to be confounded with mange, never resulting from anything but exposure to extremes of temperature, without the suffering animal being able to avail himself of such protections as, in a state of nature, instinct would have induced him to adopt. They are peculiarly troublesome in the heats of summer, if the hog be exposed to a hot sun for any length of time, without the advantage of a marsh or pool in which to lave his parched limbs and half scorched carcass. Anoint the cracked parts twice or thrice a day with tar and lard, well melted up together.

X. RATILLE, or SWELLING OF THE SPLEEN.—The symptom most positively indicative of this disease, is the circumstance of the affected animal leaning towards one side, cringing, as it were, from internal pain, and bending towards the ground. The cause of the obstruction on which the disease depends is over-feeding, permitting the hog's indulging its appetite to the utmost extent that gluttony may prompt, and the capacity of its stomach admit of ; a very short perseverance in this mode of management will produce this, as well as other maladies, deriving their origin from a depraved condition of the secretions and obstruction of the excretory ducts.

On first perceiving the complaint, clear out the alimentary canal by means of a strong aperient. If you think you can manage it, you may administer this forcibly, by having the mouth kept open

origin of this disease is the same as the last, only in this instance acting upon a hog having a natural tendency to a redundancy of blood. Bleed at the back of both the ears as copiously as you can, and if you cannot obtain a sufficient quantity of blood from these sources, have recourse to the tail. Administer an emetic, of which a decoction of chamomile flowers will be found the safest; a sufficient dose of tartar emetic, which will be far more certain. After this, reduce for a few days the amount of the animal's food, and administer a small portion of sulphur and nitre in each morning's meal.

XIII. *HEAVINGS*, or inflammation of the lungs.—This disease, which has acquired its name from the principal symptom by which it is characterized, is scarcely to be regarded as curable. If, indeed, it were observed in its first stage, when indicated by loss of appetite, and a short, hard cough, it might run some chance of being got under by copious bleeding, and friction with stimulating ointment on the region of the lungs, minute and frequent doses of tartar emetic should also be given in butter, all food of a stimulating nature carefully avoided, and the animal kept dry and warm. Under these circumstances, there would be no reason absolutely to despair of a cure, but it would be advisable at the same time, if the hog, when this primary stage of the malady was discovered, were not in very poor condition, to put him to death. If once the *heavings* set in, it may be calculated with confidence that the formation of tubercles in the substance of the lungs has begun, and when these are once formed, they are very rarely absorbed. The cause of this disease is damp lodging, foul air, want of ventilation, and unwholesome food. It is difficult to suggest what should be done when matters have reached this pass, or what remedies would prove of any service. It is now too late in most cases to resort to blood-letting, and the hide of the hog is so tough that it is not easy to blister it, for the purpose of counter-irritation; you may, however, try the following, though perhaps the knife might be best, if only to relieve the poor sufferer, and provide against the danger of infection; for it may be as well to state, that once tubercular formation becomes established, the disease may be communicated through the medium of the atmosphere, the infectious influence depending upon the noxious particles respired from the lungs of the diseased animal. Shave the hair away from the chest, and beneath each fore-leg; wet the part with spirits of turpentine, and set fire to it; you will, of course, have had

the patient well secured, and his head well raised, and have at hand a flannel cloth, with which to extinguish the flame, when you conceive it has burned a sufficient time to produce slight blisters; if carried too far, a sore would be formed, which would be productive of no good effects, and cause the poor animal unnecessary suffering. Calomel may also be used, with a view to promote the absorption of the tubercles, but the success is questionable.

XIV. DIARRHŒA, or *looseness*.—The symptoms, of course, require no comment, as they constitute the disease. Before attempting to stop the discharge, which, if permitted to continue unchecked, would rapidly prostrate the animal's strength, and probably terminate fatally, ascertain the quality of *food* the animal has recently had. In a majority of instances, you will find this to be the origin of the disease; and if it has been perceived in its incipient stage, a mere change to a more binding diet, as corn, *flour*, &c., will suffice for a cure; if you have reason to apprehend that *acidity* is present, produced in all probability by the hog having fed upon coarse, rank grasses in swampy places, give some chalk in the food, or powdered egg-shells, with about half a drachm of powdered rhubarb; the dose of course varying with the size of the hog. In the acorn season, and where facilities for obtaining them exist, they alone will be found quite sufficient to effect a cure. When laboring under this complaint, dry lodging is indispensable; and *diligence* will be necessary to maintain it and cleanliness.

XV. QUINSY, or an inflammatory affection of the glands of the throat.—Shave away the hair, and rub with tartar emetic ointment. Stuping with very warm water is also useful. When external suppuration takes place, you may regard it as rather a favorable symptom than otherwise. In this case, wait until the swellings are thoroughly ripe, then, with a sharp knife, make an incision through the entire length, press out the matter, wash with warm water, and afterwards dress the wound with any resinous ointment, or yellow soap with coarse brown sugar.

XVI. TUMORS, or hard swellings, which make their appearance on several different parts of the animal's body. It would not be easy to state the causes which give rise to these tumors, for they vary with circumstances. They are not formidable, and require only to be suffered to progress until they soften; then make a free incision, and press out the matter. Sulphur and nitre should be

given in the food, as the appearance of these swellings, whatever be their cause, indicates the necessity of alterative medicines.

XVII. CATARRH, an inflammation of the mucous membranes of the nose, &c., if taken in time, is easily cured by opening medicine, followed up by warm bran-mash, a warm, dry sty, and abstinence from rich grains or stimulating farinaceous diet. The cause has probably been exposure to drafts of air—see to it.

The instructions given comprise all that the amateur will ever find necessary for domestic practice, and FAR MORE than he will ever find occasion to follow, if he have attended to cleanliness, dry lodging, regularity of feeding, the use of *salt* in the food, and the addition of occasionally a small quantity of sulphur and nitre to the morning's meal.

CHAPTER X.

SLAUGHTERING AND CURING.

THE Almighty Creator, when he had formed man, and placed him upon the earth, gave him power of life and and death over all the inferior animals. This power was, however, given to him to be used, not to be abused; while permitted to slay for food, clothing, or other necessities, nay, luxuries of life, it was never designed by our all-benevolent as well as omnipotent Lord that this power should be converted into a medium of cruelty, or that life should be taken away from any of his creatures in any other than the most humane manner possible. The necessity of humanity towards animals thus stands as not only a high moral duty, but one absolutely enjoined as a divine ordinance; it is also a part and parcel of all that is noble or excellent in human nature.

It is a mistake to suppose that this poor animal is insensible to pain. The poor hog does indeed feel, and that most acutely; well would it be for him that he did not, for then what miseries would he not be spared! he would not then care whether he was put out of pain at once, or suffered to hang up by the hind legs, the limbs previously dislocated at the hocks, between the tendons and the bone of which has been passed the hook by which he is suspended. Were he indeed insensible to pain, it would of course be a matter of indifference whether or not he were suffered to die

first, or, as soon as he had bled a sufficient quantity—was, still living and breathing, plunged into boiling water, in order to remove his hair; or then, with a refinement of cruelty that would not even permit of his being put out of his misery so soon, removed from the cauldron, ere life or feeling had yet departed, opened, and disembowelled alive.

I should be sorry to give pain to the feelings of any of my readers, but I had rather hurt their feelings than leave a suffering, a tortured quadruped, and that, too, one so useful to us, to experience such an ungrateful return, in the shape of such terrible and revolting miseries. I have described nothing but what I have personally witnessed, and I trust that what I have said may induce master-butchers and others to ascertain the conduct of their slaughterers, and the manner in which they perform their necessary but painful duty.

The usual mode of killing a hog in the country parts of England is, is, or used lately to be, fastening a rope around the upper jaw, and throwing it across a joist or beam; this is hauled by an assistant just sufficiently tight to compel the animal to support himself upon the extremities of his toes, with his snout elevated in the air. The butcher then kneels in front of him, and taking a sharp and pointed knife, first shaves away the hair from a small portion of the front of the throat, then gently passing the sharp-pointed steel through the superficial fat, gives it a plunge forward, a turn, and withdraws his weapon. A gush of blood follows, which is usually caught in proper vessels, for the purpose of forming black puddings. The rope is somewhat slackened—the victim totters, reels, the eye glazes—his screams cease—he falls, and life would speedily become extinct; but, alas! the butcher is paid by the job, he is in a hurry, and ere the breath is out of the poor brute's carcass, nay, ere he ceases to struggle or moan, he is tumbled into the scalding tub; he is then withdrawn in a second, placed upon a table, the hair and bristles carefully removed by scraping with a knife; disembowelling follows—and it is well if the poor wretch has perished before that process commenced.

In olden times, it would appear that our butchers were less hasty, or more merciful. All the skulls of hogs were broken in upon the frontal bones, precisely in the same manner as are now the skulls of oxen and other animals. Were the hog first deprived of sensibility by compression of the brain, as produced by a violent blow upon the forehead, he would be a passive victim in the butch-

er's hands, who could not only perform all the remainder of the process with more humanity, but—and think well of it, such of you as might probably be swayed by no other consideration—with more despatch and less trouble.

I am happy in being able to add, that the humane custom of knocking the hog on the head before cutting his throat, is rapidly gaining ground, and that no respectable butcher will allow it to be dispensed with. In the country parts of both England and Ireland, however, the old abuses are still permitted to exist; and I am grieved to say that *everywhere*, with a very few honorable exceptions, the barbarous practice of plunging the hog into the scald, while yet living, is still *systematically* and *designedly* adopted. A very respectable man surprised me the other day, by deliberately telling me that “A hog will no way scald so well as when the life is in him.” This is, however, a mistake. It is only necessary not to suffer the animal to become cold and stiff. Readers—I raise my voice in behalf of a most useful and most cruelly treated animal; may I beg of you all to unite with me in the cause of humanity, and then I shall not have raised my voice in vain.

And now, having supposed the animal killed and dressed, let us proceed to inquire into the most approved modes by which its flesh may be converted into bacon and ham. The hog should be left fasting for full twenty-four hours before killed; and after the carcass has hung all night, it should be laid on its back upon a strong table. The head should then be cut off close by the ears, and the hinder feet so far below the houghs as not to disfigure the hams, and leave room sufficient to hang them up by; after which the carcass is divided into equal halves, up the middle of the back-bone, with a cleaving-knife, and, if necessary, a hand-mallet. Then cut the ham from the side by the second joint of the back-bone, which will appear on dividing the carcass, and dress the ham by paring a little off the flank, or skinny part, so as to shape it with a half round point, clearing off any top fat that may appear. The curer will next cut off the sharp edge along the back-bone with a knife and mallet, and slice off the first rib next the shoulder, where he will find a bloody vein, which must be taken out, for, if left in, that part is apt to spoil. The corners should be squared off when the ham is cut out.

I quote this passage, because it recommends a novel mode of cutting bacon, and one which I have not as yet seen practised. The ordinary practice is to *cut out* the spine or back-bone, and, in some

English counties, to take out the ribs also. It is only in porkers that the back-bone is thus divided.

The most approved mode of saving bacon, as practised by a majority of those extensive curers who have kindly favored me with the necessary details of this portion of my subject, is as follows :—If the swine you design killing have been a recent purchase, and have been driven from a distance, so as to have become winded or jaded, it is right that they should be kept up for a week, or perhaps more, until the effects of the journey have been entirely removed, and the animals restored to their original tranquillity and primeness of condition ; during this interval they should be fed upon meal and water. A difference of opinion exists, as to whether this food should be given in a raw state or boiled. I have taken some pains to ascertain the truth, and have no hesitation in pronouncing in favor of the latter ; at the same time, however, the mess should be given in a perfectly cold state, and not of too thick consistence. Some recommend that a small dose of nitre should be given daily in the food for a fortnight previous to killing ; others pronounce this to be unnecessary ; but all unite in recommending a very considerable reduction in the animal's food for two or even three days before killing, and a total deprivation of food for at least the last twelve hours of life.

In the country districts of Ireland, the hog is usually secured by the hind leg to a post or ring, the head is fastened to another ; the animal is thus securely strapped down upon a sloping slab or table, and the head is severed from the body by means of a sharp knife. I am informed that the bacon of a hog thus killed is more easily saved, and is superior in flavor and color.

The ordinary mode of killing a hog is, I am most happy to say, gradually approximating to such as humanity would dictate. It is thus :—A flat stage or table, inclining downwards in one direction, is prepared ; the pig receives a powerful blow with a mallet upon the forehead, which effectually deprives him of sensation ; he is then thrown upon the stage, and a knife plunged into the chest, or rather into that spot where the chest meets the neck. The blood flows freely, and is received into vessels placed for the purpose. A large tub or other vessel has been previously got ready, which is now filled with boiling water. The carcass of the hog is plunged into this, and the hair is then removed with the edge of a knife. The hair is more easily removed if the hog be scalded ere he stiffens or becomes quite cold, and hence some butchers cruelly

conceive it advisable to scald him while *yet there is some life in him*. The animal is now hung up, opened, and the entrails removed; the head, feet, &c., are cut off, and the carcass divided, cutting up at each side of the spine. A strong knife and mallet are necessary for this purpose, and will be found to answer better than a saw.

Bacon is cured in very different ways. For domestic use, it is usually laid upon a table, and salt with a little nitre added, well rubbed in, first on one side and then on the other, either with the bare hand or the salting glove. Some straw is then placed upon the floor of an out-house, a flitch laid thereon, with the rind downwards—straw laid above this, then another flitch, and so on; above the whole is placed a board, and heavy stones or weights above all. In three weeks or a month the meat is sufficiently salted, and is hung up on hooks in the kitchen rafters. The general practice of burning wood and turf in Irish kitchens, imparts a sweetness to the bacon thus saved that is not to be met with in *any* which you can purchase.

Another mode is as follows:—Prepare a pickle, by boiling common salt and nitre in water; mix, for a single hog, of tolerable size, one pound of coarse brown sugar, with half a pound of nitre; rub this well in with the salting glove, then put the meat into the pickle, and let it lie in this for two days; afterwards take it out of the pickle, and rub it with salt alone, then put it back into the pickle.

For a *mild cure*—Form *sweet pickle*, by boiling molasses with salt and water; rub the meat with sugar and nitre—add a small portion of strong pickle to the meat—put the meat into this, and let it lie in it for three weeks. If there be any spare room in the cask, fill up with molasses—eight pounds of salt, one pound of nitre, and six pints of molasses will about suffice for each hundred weight of meat; and will take about five gallons of water.

In about three weeks, less or more time being required according to size, take the meat out of pickle, and hang it in the drying-house. While in the drying-house, the flitches should be hung, neck downwards. You may cut out the ham, and trim the flitch according to fancy—nearly every county in England has, in this respect, a fashion of its own.

You then remove your hams and bacon to the smoking-house: they should not be suffered to *touch each other*; with this precaution you may hang them as closely as you please. Smoke-houses are of every dimension, but the smallest answer as well as the

most extensive. Before suspending the meat in the smoke-house, it should be previously well rubbed over with bran. The fire is made of saw-dust, which burns with a low smouldering glow, giving out far more smoke than if actually flaming.

In the process of smoking, your meat will lose from about fifteen to twenty pounds per hundred weight—a fact necessary to be borne in mind.

Sometimes the hogs are killed before they arrive at full size, and their hair removed by singeing; the bacon and hams of these are said to possess peculiar delicacy of flavor.

The best saw-dust for smoking hams or bacon is that made from oak, and it should be thoroughly dry. The saw-dust of common deal imparts a flavor of a disagreeable character, not unlike that of red herrings.

WESTPHALIAN HAMS.—The *genuine* Westphalian bacon is particularly good, but all sold under that name is not genuine; spurious Westphalian hams are manufactured to a considerable extent. The process of imitation is not difficult, and none but one of the trade can detect the imposture. The fine quality of Westphalian bacon depends on several causes: the healthy and semi-wild life the swine are permitted to enjoy—their relationship to the wild boar—they are not fattened to the fullest extent previous to killing. A large proportion of *sugar* and *juniper-berries* are used in curing—the proportion being usually one and a half pounds of sugar to three of salt, and two ounces of nitre. The *smoke* is also applied in a *cold state*. This is, perhaps, the principal secret. The hams are all hung at the top of a very lofty building, and by the time the smoke reaches them it is perfectly *cold*.

The ham of the Westphalian hog closely resembles that of the common *old Irish* breed; and the hams of that animal, when cured as has been described, could not be distinguished from those of Westphalia by the nicest judge.

LIMERICK.—The hams cured in Limerick have long enjoyed considerable celebrity, and are supposed to be superior to any others—those of Westphalia and Hampshire alone excepted. Their excellence appears chiefly to depend upon the sparing use of salt, and the substitution for it, to a great extent, of coarse sugar, with judicious smoking. Some of the Limerick smoking-rooms are upwards of thirty feet in height.

HAMPSHIRE.—The Hampshire bacon is in greater esteem than even the Westphalian—a circumstance attributable to the superior

excellence of the New-forest *swine* to those of that country, while they share equally with them the privilege of a forest life and acorns. The Hampshire curers smoke with saw-dust. In both this county and in BERKSHIRE, *singeing* is adopted more generally than scalding, and this process is considered superior to scalding, the latter being supposed to soften the rind and render the fat less firm.

The WILTSHIRE bacon is of peculiarly delicious quality, but the cause is obvious, and is not to be referred to any of the details of the curing process. This bacon is prepared from *dairy-fed* pork—this is the true secret.

In some counties, the pig is *skinned* prior to curing. Some amount of additional profit is of course derivable from this practice, but the bacon is inferior, being liable to become rusty, as well as to waste in the boiling.

Hams and flitches should always be hung up in a *dry* place, indeed it will be found useful to sew up the former in pieces of canvass or sacking, as is practised with the Westphalian.

It is difficult to save bacon in summer time, or in warm climates, but a machine has recently been invented, for which a patent has been obtained, which renders the saving of meat under the most adverse circumstances perfectly easy. The machine acts as a force-pump or syringe. Its extremity is inserted into the meat, and the handle worked; the brine, which must be very strong, is thus *forced through* the grain of the meat, and it is effectually impregnated with it, and well cured long ere it could turn: there can be no doubt but that this instrument is, under such circumstances as I describe, eminently useful—but it is no less certain that meat so cured is not equal to that saved under ordinary circumstances, and in the ordinary manner; the *grain of the meat* is too much loosened by the use of the machine, and the texture is thus deteriorated; it should, therefore, only be used when *necessity* requires, and never by *preference*, where the ordinary process can be adopted.

To extract the superabundant salt from your meat, prior to use, has long been a desideratum. The steeping it in water to which carbonate of soda has been added, is found useful; so is the addition of the same substance, or of lime, to the water in which it is boiled; so is changing the water, after the meat has been about half boiled. Sailors find washing the meat in sea water very efficacious, but I have made the discovery that this object can be attained to a far fuller extent by a very simple chemical process.

Put your meat to steep in tepid water, and after it has lain in it for some hours, add a small quantity of sulphuric acid. In three or four hours, take it out, and wash it two or three times in water; to the third water, add a small portion of carbonate of soda. Take your meat out, wash it again, and boil it for dinner. You will find the salt nearly, if not wholly, discharged; but you need not be surprised should the *color* of the meat be somewhat darkened—the deterioration does not extend farther; the flavor remains the same as when first corned, and the article becomes as wholesome as fresh meat. It is possible that this simple process may be found useful in long voyages, for a long-continued use of salted animal food without a free use of vegetables is found to contribute to the production of many diseases.

The following communication, coming from a curer by profession, will be found at once interesting and useful:—

“The hog is usually kept fasting for twenty-four hours previous to being killed. He is then brought to the slaughter-house, and despatched in the following manner: The butcher takes a maul (a hammer with a long handle, like those used for breaking stones on a road), and with it strikes the hog on the forehead; if he be an expert hand, a single blow will suffice to knock the hog down, and render him quite senseless. A knife is then taken, and the butcher sticks the animal in the lower part of the throat, just between the fore legs. A boiler or tub, full of very hot or boiling water, is then prepared, in which the hog is immersed until the hair becomes so loose that it can be scraped off with a knife quite clean; where there is no convenience of this kind, the same effect may be produced by pouring boiling water over the hog. The hog is then hung up by the hind legs, cut up the middle, and the entrails taken out; after this, the carcass is left there for about twelve hours, to cool and become firm, when it is fit for boning or cutting up. Sometimes, instead of scalding, the hog is singed by fire—burned straw is generally used for this purpose; and this is called ‘singed pork.’

“The following is the mode of boning or cutting:—The pig is placed on a strong table or bench; the head is then cut off close to the ears; the hog is then opened down the back, a cleaver or saw is used for the purpose, and both back-bone and hip-bones are taken out, except in one or two places, yet to be spoken of, where a different system is pursued. The hind-feet are then cut off, so as to leave a shank to the ham. The fore-legs are then cut round

at the hough, the flesh scraped upwards off the bone, and off the shoulder-blade, which is taken out, quite bare, under the side. The saw is then run along the ribs, so as to crack them; they then lie quite flat. The hog is then divided straight up the back, and the sides are ready for salting, the ham still remaining in.

“When the sides are ready for salting, they are well rubbed on the rind side, and the space from which the shoulder-blade was taken out is filled with salt. The sides are then laid singly upon a flagged floor, and salt is shaken over them. In a day, or two days if the weather be cold, they must again be salted in the same manner; but now two sides may be put together, and powdered saltpetre shaken over each side, in the proportion of about two ounces to each side, if of average bacon size. After three or four days, the sides are to be again changed, the shanks of the hams rubbed, the salt stirred on, a little fresh salt shaken over them, and five or six sides may now be placed over each other. The sides may then be left thus for a week, when they may be piled one over the other to the number of ten or twenty sides, if you have killed so many hogs. Leave them so for above three weeks, until they get firm; they may then be considered saved, and will keep so for six or eight months, or according to pleasure.

“When required for use or for market, the sides are taken out of the salt, well swept and cleaned—the ham taken out, hung up, and dried with turf smoke; if a brown color be desired, a little sawdust of hard wood may be thrown over the turf. If hung up in a kitchen where turf is burned, and suffered to remain, not too near the fire, the same effect will be produced; and if the bacon have been well saved in salt, it will be excellent.

“The Belfast and Limerick methods of cutting differ from what I have described, inasmuch as the hip bones are left in, and the hams are cut out, while the hog is fresh, and saved separately. In some cases, also, the ribs are taken out of the sides, and, in Belfast, the shoulder blade is taken *out over the side*.

“Both the BELFAST and LIMERICK hams are cured in the same mild manner; they are, as I have stated, cut out of the hog when fresh, cured separately, and only left a sufficient time to be saved, and no more. They are not suffered to become too *salty*, a fault sometimes perceptible in the Wicklow hams. The Limerick and Belfast curers also make up different other portions of the hog separately, as *long sides*, *middles*, and *rolls*, for the English market.

" Sometimes the ribs are taken out, and sometimes not, according to the market for which they are intended.

" Limerick and Belfast hams are cured in the following manner:—They are cut fresh from the pig, with the hip bones left in them, and are placed on a flagged floor, the front of the second ham resting upon the shank of the first, and so on until all are placed; they are then sprinkled with strong pickle from a watering pot, and a small quantity of salt is shaken over them. Next day, the hams are taken up, well rubbed with salt, and laid down as before, when saltpetre is shaken over them in quantities proportionate to their size; they are left so for two days, and then taken up and rubbed as before, when they are laid down again, according to the space they have to fill—from three to six hams in height, with layers of salt between. After six days, the hams are reversed in the piles, that is, those that were packed on the top are put at the bottom. They then remain for six days longer in the pile, when they are considered cured. They are then taken up, and washed, and hung up to dry in the air. When they are to be smoked, they should be placed in a house made for that purpose, and smoked—in Belfast, with wheaten straw and sawdust, in Limerick with peat or turf.

" The English method of cutting up and curing is similar to that practised in Belfast and Limerick, with the difference, that, with the exception of Hampshire, and, I believe, one other county, they never smoke their bacon.

" We have, this season, had imported a great quantity of hams and other bacon from Cincinnati, and Baltimore, in America. They are cut in the same manner as the Limerick, and are in much esteem. The cured *shoulders* of the hog have also been imported—cut straight across, with the blade in, and the shank left attached. We have also received *middles*, and quantities of pork, in barrels, which is merely the hog cut up in pieces, and pickled.

" I have reason to know that there are at the present time numbers of curers emigrating from our best curing districts to America, and we may accordingly expect, ere long, to find our American hams surpassing, owing to the *quality* of the hogs they will have to operate upon, even our long-famed Limerick hams."

THE END.

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